



LESSONS FROM THE FIELD—VOLUME 4

# Digging Deeper to Focus and Extend Data Use

FEATURING EXAMPLES OF NSSE DATA USE BY:

Andrews University

Biola University

Bowling Green State University

Bucknell University

California State University, San Bernardino

California State University San Marcos

Carlow University

Indiana University–Purdue University Indianapolis

Keuka College

North Central College

The Ohio State University

Oklahoma State University

Rose-Hulman Institute of Technology

Southern Connecticut State University

St. Olaf College

University of Hawai'i at Mānoa

University of Houston–Victoria

University of Mary Washington

University of Minnesota Duluth

University of Nebraska–Lincoln

University of San Diego

University of Toronto

William Jewell College

# Overview of NSSE

The National Survey of Student Engagement (NSSE) annually surveys first-year and senior students at participating baccalaureate-granting colleges and universities to measure the extent to which they engage in and are exposed to proven educational practices that correspond to desired learning outcomes. Institutions use these reliable, actionable survey results to develop, assess, and improve programs and practices that promote student engagement on their campuses. Administered in the spring term, the survey is short and easy to complete, with questions for undergraduates about:

- Students' exposure to and participation in effective educational practices;
- Their use of time in and outside of class;
- The quality of their interactions with faculty, staff, and other students;
- The supportiveness of their institution's environment; and
- Their perceived gains from the educational experience at their institution.

Institutions participating in NSSE receive a detailed report with customized comparisons to selected peer institutions, supporting materials and resources, and a student-level data file. To date, more than 1,600 colleges and universities in the US and Canada have participated.

The NSSE Institute for Effective Educational Practice was created to provide user resources and to respond to requests for assistance in using student engagement results to improve student learning and institutional effectiveness.

Since the NSSE Institute's inception, in 2003, the work of its staff and associates has helped numerous institutions enhance student success on their campuses and has yielded a major national study of high-performing colleges and universities; dozens of presentations at national and regional meetings; and multiple user resources including workshops, webinars, *Accreditation Toolkits*, and the *NSSE Data User's Guide*.

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## Introduction

NSSE's sharp focus on measuring what matters to student learning and success can richly inform an essential part of an institution's comprehensive decision-support system.

*"NSSE asks things that matter and we've found the results to be sufficiently interesting and relevant to engage student affairs professionals and faculty quite easily in making meaning of the results."*

LAURA COGHLAN,  
DIRECTOR OF  
INSTITUTIONAL  
RESEARCH AND  
ASSESSMENT, THE  
EVERGREEN STATE  
COLLEGE

Since NSSE's debut in 2000, hundreds of institutions have generously shared the actions they have taken using their student engagement results. The 23 new examples of institutions' actions documented in this volume of *Lessons from the Field* illustrate the project's catalyzing influence in the improvement of undergraduate education.

Even more important, however, in addition to demonstrating more intentional use of evidence to improve student outcomes by committed educators, these institutional examples affirm a cultural shift in higher education toward greater acceptance of the centrality of assessment to the practice of a learning organization.

For more than a decade, colleges and universities have experienced greater pressure to demonstrably improve student success rates and increase educational quality and equity. Meanwhile, institutions also face higher expectations for the use of data to inform their decision making. To address these demands, institutions are striving to build precise predictive models for retention and to employ analytics to identify students at risk.

While these efforts represent advancements, they also present the hazard of getting distracted by the technology and losing focus on the role of evidence about the quality of students' learning experiences in motivating campus action to improve student success.

As the *Statement of Aspirational Practice for Institutional Research* (Swing & Ross, 2016) asserts, student success must be at the center of a new vision of the decision-support system in postsecondary education today. NSSE's sharp focus on measuring what matters to student learning and success can richly inform an essential part of an institution's comprehensive decision-support system.

The importance of institutional focus on student success and the power of using data to inform improvements to educational quality are vividly reflected in all of the stories in this volume. These institutions are clearly moving beyond merely collecting data to managing and leveraging their data to realize improvement in the student experience. They are sharing data with more departments and units, creating accessible data visualizations,

## Index of Institutional Examples

### RESPONDING TO ACCREDITATION

California State University San Marcos  
University of Mary Washington  
University of San Diego

### CREATING SPECIALIZED REPORTS

University of Nebraska–Lincoln  
University of Toronto

### INCREASING ACCESS TO DATA

Bucknell University  
Oklahoma State University  
University of Hawai'i at Mānoa

### SHARING RESULTS ACROSS CAMPUS

Bowling Green State University  
California State University, San Bernardino  
Indiana University–Purdue University  
Indianapolis  
North Central College  
St. Olaf College  
University of Houston–Victoria  
University of Minnesota–Duluth

### ENHANCING INSTRUCTIONAL PRACTICE

Andrews University  
Biola University  
Carlow University  
Keuka College  
The Ohio State University  
Rose-Hulman Institute of Technology  
Southern Connecticut State University  
William Jewell College

*“NSSE provides valuable information to institutions that can be utilized in myriad ways and to support other data efforts that may be taking place on campus.”*

BETHANY MILLER,  
DIRECTOR OF  
INSTITUTIONAL  
RESEARCH AND  
ASSESSMENT,  
CORNELL COLLEGE

and using results to motivate meaningful change to instructional practice and institutional policy on their campuses.

The institutional accounts that follow also illustrate the increasing depth of NSSE use and the unique ways data can reveal insights about the student experience to influence institutional change. This work demonstrates exciting, tangible improvements to educational effectiveness and student success.

But we are far from done.

The new vision of institutional research extols expanding data access to all who can be actively involved in turning it into decision-support information, focusing on student success, and assuring that instructional practice produces desired student outcomes. NSSE results compellingly facilitate these objectives and the broader agenda for continuous improvement in undergraduate education.

Making effective use of student engagement data to improve student success has been and continues to be the most consequential outcome of the NSSE project. We are indebted to all the campuses that have shared their stories of data use and hope they inspire action at more colleges and universities.

Andrews University



## ENGAGEMENT INDICATORS & HIGH-IMPACT PRACTICES

To represent the multiple dimensions of student engagement, NSSE provides results on 10 Engagement Indicators calculated from 47 core NSSE items and grouped within four themes. The Engagement Indicators provide valuable information about distinct aspects of student engagement by summarizing students' responses to sets of related survey questions.

### ENGAGEMENT INDICATORS (EIs)

#### THEME: Academic Challenge

Higher-Order Learning  
Reflective & Integrative Learning  
Learning Strategies  
Quantitative Reasoning

#### THEME: Learning with Peers

Collaborative Learning  
Discussions with Diverse Others

#### THEME: Experiences with Faculty

Student-Faculty Interactions  
Effective Teaching Practices

#### THEME: Campus Environment

Quality of Interactions  
Supportive Environment

Additionally, in a separate report, NSSE provides results on six High-Impact Practices, aptly named for their positive associations with student learning and retention through enriching educational experiences that can be life changing. High-Impact Practices typically demand considerable time and effort, facilitate learning outside of the classroom, require meaningful interactions with faculty and other students, encourage collaboration with diverse others, and provide frequent and substantive feedback.

### HIGH-IMPACT PRACTICES (HIPs)

Learning Community  
Service-Learning  
Research with Faculty  
Internship/Co-op/Field Experience  
Study Abroad  
Culminating Senior Experience



# Featured Institutional Uses

## Multi-Year Findings Spark Efforts to Improve Feedback to Students

### ANDREWS UNIVERSITY

**NSSE findings informed faculty of the multiple ways they could provide feedback to students and deepened their understanding of students' needs and expectations regarding feedback.**

According to Andrews University's results from NSSE 2013, their students received feedback from faculty less frequently than students at comparison institutions—specifically, in the extent to which their instructors provided (a) feedback on a draft or work in progress and (b) prompt and detailed feedback on tests or completed assignments. Examining responses to these two survey items, the Office of Institutional Effectiveness noticed that the university's average score was lower than those of the comparison group, the peer institutions, and NSSE overall that year. When these findings were presented to faculty, however, they were met with skepticism—and with comments such as “I give grades back in a week”—motivating the presenters to further investigate this aspect of education and to attempt to expand the understanding on their campus of what constitutes effective feedback.

To mitigate possible faculty apprehension about NSSE data, the office conducted a

separate follow-up student survey focusing on feedback from faculty. Students were asked about the value of different types of feedback such as opportunities outside of class to ask the instructor questions, rating scales with detailed descriptions of performance, rubrics for grading, and written comments. Students were also asked about the timeframe within which feedback should be given for different types of assignments (e.g., drafts of papers or projects; quizzes and short assignments; long assignments, papers, or projects; and major exams).

The results from this survey indicated that over 80% of students found most forms of feedback either “valuable” or “very valuable” and that they expected feedback in the next class period for quizzes and short assignments and within a week for larger assignments. These findings showed that Andrews University students found multiple types of feedback (beyond grades alone) valuable to their education and that the students had reasonable expectations regarding the timeframe for feedback. Presented at the general faculty meeting in April 2014, the findings informed faculty of the multiple ways they could provide feedback to students and deepened their understanding of students' needs and expectations regarding feedback.

To evaluate the effects of this intervention, the same office compared the university's NSSE 2013 and NSSE 2015 scores. Using their Multi-Year Report from NSSE, researchers were able to track the change in the Student-Faculty Interaction Engagement Indicator—a factor comprising four NSSE items, two of which (mentioned above) began this campus conversation. By using that report, the Assistant Provost of the Office of Institutional Effectiveness was able to see improvements in student engagement related to interaction with faculty by both first-year and senior students. In this effort, Andrews University used NSSE data to identify an area of concern; to explore it further on their campus; to provide faculty with actionable evidence on how to improve their teaching; and, by comparing old and new results in their Multi-Year Report, to measure the intervention's effects.

### TIPS FOR MULTI-YEAR ANALYSIS

With access to multi-year data, institutions can measure change due to campus initiatives, identify trends, and confirm stability and reliability. Now that the updated NSSE has been in the field for five years, we offer support to institutions in their multi-year analyses.

Here are some tips for effectively using the data:

- Compare cohorts from one year to another (e.g., 2013's first-years vs. 2016's first-years).
- Make longitudinal comparisons (e.g., 2013's first-years vs. 2016's seniors).

Remember that:

- Engagement is a process measure, not an achievement measure;
- The first and senior years are different contexts with different engagement patterns;
- First-years include students who will leave your institution; and
- Seniors include persisters as well as transfers.

# Sharing and Using NSSE Data to Drive Sustainable Improvement

## BUCKNELL UNIVERSITY

The purpose of making data more accessible is to encourage departments and units across campus to use this information more effectively to improve practice.

In 2014, during a board of trustees meeting, Bucknell University President John C. Bravman outlined five attributes critical to the institution's long-term sustainability: being forward looking, data driven, highly intentional, prudently bold, and student centered. Applying that vision to become highly intentional about sharing and making data as accessible as possible to administration, faculty, staff, students, and external constituents, Bucknell has developed a number of dashboards focused on specific topics.

One of these dashboards, dedicated solely to NSSE data, provides means for each of the NSSE Engagement Indicators (EI) and frequencies for the items they comprise and, further, allows users to disaggregate data by race, gender, residential college, Greek life affiliation, Pell recipient status, and first-generation status. On a number of other dashboards, NSSE data supplement the institution's internal data as well as data from other instruments. Bucknell's Diversity Dashboard, for example, includes items from NSSE's Discussions with Diverse Others Engagement Indicator, among others, and allows for comparisons by various student demographic characteristics.

The university's Student Learning Outcomes web page pairs NSSE results with data from the Hart Research Associates survey of employer priorities for college learning and success (see Figure 1; [www.aacu.org/leap/public-opinion-](http://www.aacu.org/leap/public-opinion-research/2015-survey-results)

[research/2015-survey-results](http://www.aacu.org/leap/public-opinion-research/2015-survey-results)) and with the Higher Education Data Sharing Consortium's HEDS Alumni Survey (see Figure 2; [www.hedsconsortium.org/alumni-survey](http://www.hedsconsortium.org/alumni-survey)). Results are also displayed of students' participation in High-Impact Practices (see Figure 3).

Two additional dashboards in development at Bucknell will combine data from multiple surveys. One, the Campus Climate Dashboard, will be an invaluable resource for numerous campus offices by providing a summary of findings related to campus climate issues from NSSE, the College Senior Survey (CSS), the Consortium on High Achievement and Success (CHAS) survey, and the National College Health Assessment (NCHA) survey. The other, the General Education Dashboard, will provide a mix of direct and indirect measures (from NSSE and alumni surveys) that will support the assessment efforts of faculty and administrators.

The purpose of making data more accessible is to encourage departments and units across campus to use this information more effectively to improve practice. Demonstrating this, Bucknell has used NSSE data to review the impact on student success of participating in the Residential Colleges—living-learning communities that have been a part of campus life at Bucknell for 30 years.

For this analysis, Bucknell researchers linked NSSE data with institutional retention and first-year GPA data, which served as a proxy for first-year student success. Also, Beginning College Survey of Student Engagement (BCSSE) data were used to compare the pre-college and first-year experiences of Residential College participants and nonparticipants, controlling for student background characteristics.

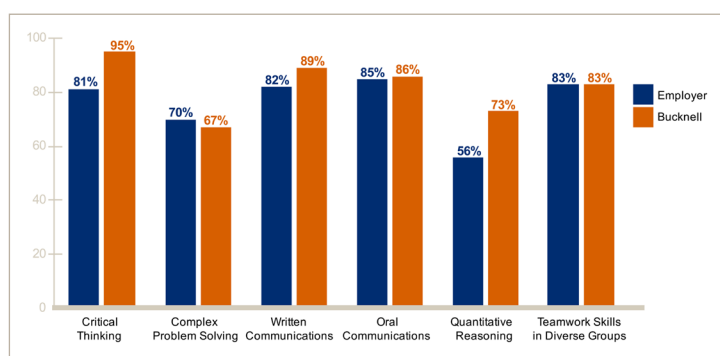


Figure 1. Bucknell Students' Engagement Compared to Employer Priorities

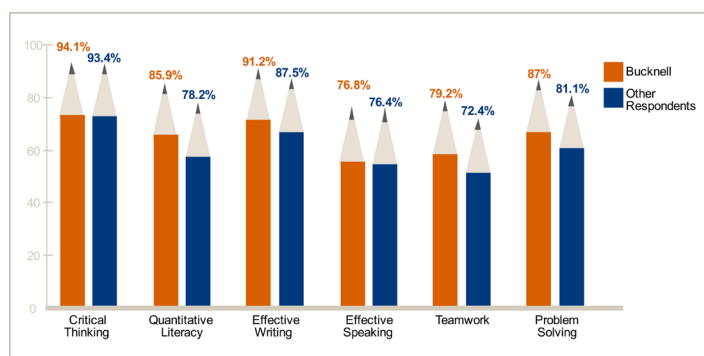


Figure 2. Students' Reports of Positive Impact on Their Learning from Their Undergraduate Experience



### EXAMPLES OF COMPELLING DATA VISUALIZATION

This volume provides several examples of institutions that graphically represent their data in ways that compel action among campus stakeholders. More examples can be found on our website:

[nsse.indiana.edu/html/inst\\_web\\_site\\_display.cfm](https://nsse.indiana.edu/html/inst_web_site_display.cfm)

Some institutions make their data publicly available through visualizations that illustrate the engagement of their students. Brock University, for example, uses Tableau software to employ dynamic reporting that allows viewers to manipulate the data:

<https://brocku.ca/institutional-analysis/external-surveys/nsse>

NSSE Institute is interested in the many innovative ways users present their data and continues to feature new examples at conferences and on the institute website:

[nsse.indiana.edu/institute](https://nsse.indiana.edu/institute)

**Bucknell has used NSSE data to review the impact on student success of participating in the Residential Colleges and to enhance diversity initiatives on campus.**

The researchers found Residential College participation significantly linked to positive results for the Reflective and Integrative Learning and the Discussions with Diverse Others Engagement Indicators, participation in High-Impact Practices, and retention. Based on these findings, Bucknell has prioritized Residential College participation, achieving a nearly 40% increase in that participation over the last three years.

Bucknell has also used NSSE findings to enhance diversity initiatives on campus. Specifically, researchers looked at responses by racial and ethnic group to individual items in the Discussions with Diverse Others Engagement Indicator and in High-Impact Practices participation. Informed by these findings, changes were then made to the training for

both Orientation Assistants (OAs) and Resident Advisors (RAs) to include new topics and offices focused on diversity and inclusion. The revised OA training includes a session on critically examining first-year students' experiences through a diversity lens, specifically paying attention to the needs of students with disabilities and students with different religious and political views as well as those who have experienced exclusion or discrimination on campus. The revised RA training emphasizes diversity and cultural fluency as core themes and has sessions dealing with power and privilege, campus climate, identity development, and global and world events. Additionally, the revised RA selection and interview process incorporates considerations related to cultural competency and diversity.

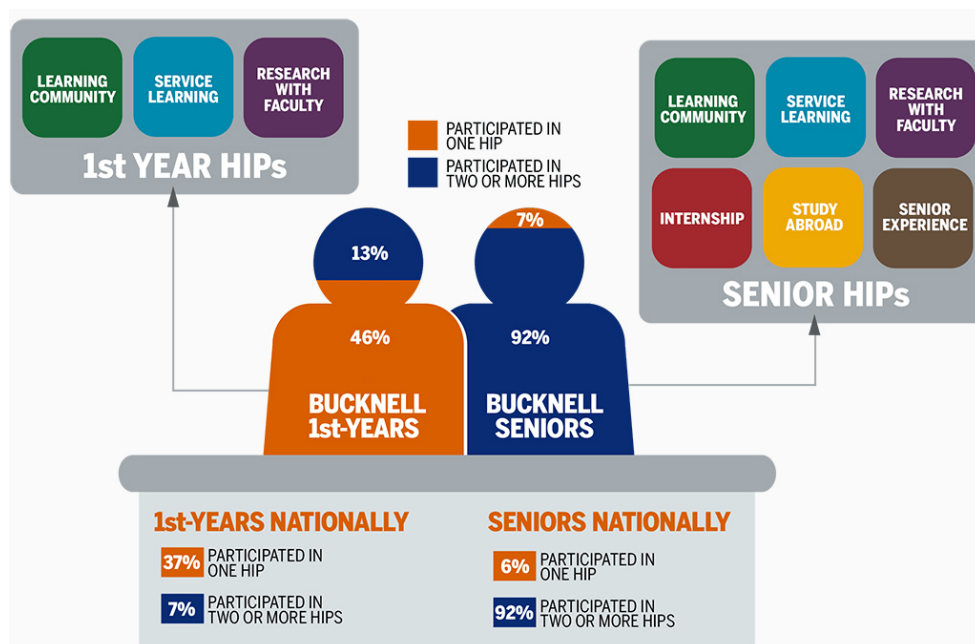


Figure 3. Bucknell Students' Participation in High-Impact Practices Compared to National Participation

# Weaving Data into Decision Making

## ST. OLAF COLLEGE

With extensive high-quality data on hand along with the knowledge of how to weave these data into decision making, St. Olaf's institutional research office is prepared to answer the question: "How well are we doing?"

At St. Olaf College, NSSE data are woven into the decision making of the Board of Regents, the President's Leadership Team, the Academic Leadership Team, the Curriculum Committee, and the Provost. For example, NSSE items and Engagement Indicators are incorporated into the Board of Regents Community Life Committee metrics for campus diversity, student well-being, and student engagement. These data are triangulated with other sources of information such as the St. Olaf Student Information System, the National College Health Assessment, and the St. Olaf Learning Goals Questionnaire. Beyond establishing reliable metrics, mapping different sources of data to desired goals allows the committee to more strongly align these goals with the St. Olaf College president's vision and to identify important areas where data are not currently being collected.

Additionally, NSSE data have recently been used by St. Olaf staff (a) to inform a particular line of decision making within the institution and (b) to analyze data collected previously to answer constituents' questions. NSSE results are also used to communicate institutional achievements to the public. For example, on St. Olaf's institutional learning outcomes website, StOGols, NSSE data are used to show evidence for Insightful Integration and Application of Learning and Intentional and Holistic Self-Development.

After a St. Olaf College NSSE administration a number of years ago, the college's Institutional Research and Effectiveness office conducted student focus groups to examine the institution's survey responses. Among the concerning issues that emerged from these focus groups was students' uncertainty about formal and informal advising and the different types of encounters with each. A task force was convened to evaluate the academic advising received by St. Olaf's students.

Expanding the institution's data collection on this issue, in its next NSSE administration, St. Olaf used the Academic Advising Topical

Module, enabling the comparison of St. Olaf's academic advising efforts with those of participating peer institutions. The resulting information gathered through the focus groups and NSSE, as well as other surveys conducted on campus and with alumni, guided the restructuring of St. Olaf's new academic advising office and also informed the hiring process for a new director of that office. In summary, to address an emergent issue in its academic advising, St. Olaf took a specific course of action—reworking academic advising—and gathered high-quality information to carry out that action successfully.

The Institutional Research and Effectiveness office has also used NSSE data to answer questions posed by the Board of Regents about the quality of the St. Olaf student experience. In one instance, board members were curious about how St. Olaf students would score in areas measured on the Gallup-Purdue Index, a national study linking college student success to high-impact experiences such as internships and extracurricular activities. Although St. Olaf had not participated in this study, the Institutional Research and Effectiveness office was able to answer the board's question by leveraging data already collected through the NSSE survey and the Higher Education Data Sharing (HEDS) Consortium alumni survey—for example, to provide the percentage of St. Olaf seniors who participated in an internship, co-op, field experience, student teaching, or clinical placement, and, further, to contextualize this percentage by providing comparison group data.

It is not uncommon for members of St. Olaf's Board of Regents to read about trends in higher education and to wonder, "How well are we doing?" With extensive high-quality data on hand—along with the knowledge of how to weave these data into decision making—St. Olaf's institutional research office is prepared to answer.



# Enhancing the First-Year Seminar with Data on Writing

## UNIVERSITY OF MARY WASHINGTON

UMW has a culture of positive restlessness—continually looking for ways to improve student experience and monitor interventions.

University of Mary Washington's (UMW) 2013 Quality Enhancement Plan (QEP)—“UMW's First-Year Seminar: Research, Write, Speak”—was developed to enhance the first-year seminar experience. UMW had established the First-Year Seminar (FSEM) requirement, in 2008, based on NSSE results indicating lower levels of engagement among first-year students. Designed as a three-credit course and featuring a student/faculty ratio of 15:1, FSEM focused on building a skill set for success in a rigorous academic environment to be learned in a content-driven context of mutual interest to the students and faculty. Topics of these FSEM courses have included Game Theory, Making a Difference, and Race and Revolution.

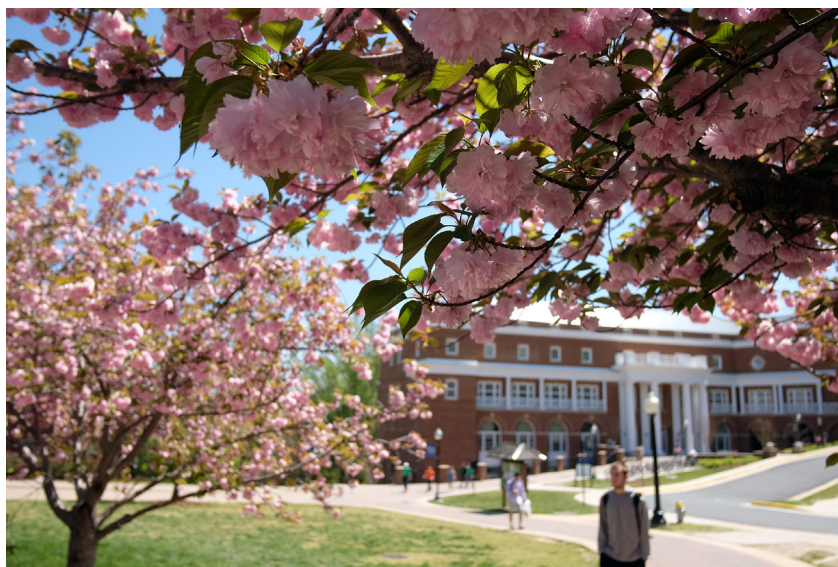
Since the creation of the required course, student learning at UMW has been monitored via institutional surveys and data, along with NSSE findings. Continued evidence indicated that FSEM could be improved, and this became the focus of the Quality Enhancement Plan advanced as part of UMW's 2013 reaffirmation of accreditation by the Southern Association of Colleges and Schools Commission on Colleges. For example, results from NSSE 2010 and 2012 indicated that, in most cases, UMW first-

year students perceived that their institution contributed less in the areas of writing and integration of ideas compared with first-year students at peer institutions. Other institutional data, such as surveys of admitted students and graduating seniors, corroborated these findings.

In response to the concerns about student writing, the faculty-authored QEP established uniform and measurable learning outcomes for all FSEM courses including, “Improve development and organization of written arguments” and “Demonstrate the ability to edit and revise in the writing process.” Also, under the direction of the QEP office, staff in UMW's academic learning centers (writing, speaking, and library) developed online learning modules to support student development in the areas of information literacy, writing proficiency, and oral communication. Instruments to measure student learning across FSEM courses included embedded assessments of core learning modules (information literacy, writing, and speaking) and standardized rubrics. Lastly, UMW identified resources to support faculty development in adopting course learning outcomes, incorporating online learning modules, and implementing assessment tools such as rubrics to evaluate student work. To further support this ambitious initiative, the institution made FSEM a premier experience for first-year students by moving all seminars to the fall semester, having the first-year seminar instructor serve as the student's first-year academic advisor, and attaching a learning community based on the student's FSEM course assignment. As a result, almost all first-year students live in a residence hall community built around the FSEM course. Results following these changes show increases in student GPA and retention.

University of Mary Washington has a culture of positive restlessness—continually looking for ways to improve the student experience and monitor interventions. As a demonstration of this culture, UMW participated in the NSSE Academic Advising Topical Module in 2014 and 2016, and results indicate strong improvements in advising experiences since involving faculty as advisors for first-year students. Future UMW improvement efforts will include examining changes in behaviors related to the Academic Challenge Engagement Indicator and increasing opportunities for faculty to speak with students regarding career plans.

University of Mary Washington



# Engaging Student Affairs in Student Engagement Improvements

## CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO

Simply getting more students to live on campus is not enough; their experience must intentionally offer the resources and support to assist them toward graduation.

The California State University (CSU) system has a clear goal: to increase graduation rates for all students across all 23 campuses to meet California workforce demands. *Graduation Initiative 2025* outlines CSU's key objectives for first-time first-year and transfer students. At California State University, San Bernardino (CSUSB), working toward these goals has meant ensuring all institutional divisions are involved in the process, including each student affairs unit. Cautious of too hastily developing and implementing new programs and initiatives, CSUSB's approach has been to thoughtfully consider ways to increase intentionality and efficiency in work already being done on campus, identifying areas already improving as well as areas needing further improvement. Figures 4 and 5 show how these data have been made accessible to campus constituents.

The Department of Housing and Residential Education (DHRE) has used NSSE to assess the impact that living on campus has on student

engagement, comparing effects not only of on- and off-campus living but also of specific housing programs (e.g., faculty-in-residence, sustainability programs). DHRE's assessments of various initiatives have looked at the relationship of students' living environment with NSSE Engagement Indicators and High-Impact Practices participation to determine which DHRE practices have the most impact on student learning and success. These findings are especially important as the institution moves toward increasing the number of students living on campus. Simply getting more students to live on campus is not enough; their experience must intentionally offer the resources and support to assist them toward graduation.

Other CSUSB offices find NSSE gives insight into populations of students who face unique challenges that other surveys may not capture. Services to Students with Disabilities (SSD), for example, searches NSSE data for trends among students with disabilities. These data combined with resources from the Council for Learning Disabilities inform the development and implementation of SSD's strategies.

The Veterans Success Center (VSC), using NSSE data to inform programmatic decisions about how best to support student veterans, created a Veterans Learning Community where military-affiliated students receive support in transitioning to the university (e.g., selecting courses, choosing a major, understanding campus requirements), participate in a seminar series to enhance academic skills (e.g., study practices) and personal skills (e.g., social networking), engage in community service and family-based activities, explore career options, and prepare for life after CSUSB. To develop coping skills for life challenges on the path to graduation, student veterans also receive on-site academic support, personal development and academic skills building workshops, a mental health support group, community enrichment projects, and family engagement activities. NSSE data were also instrumental in the development of a dedicated tutoring program and study space for military-affiliated students. VSC has partnered with the Communications Studies Department in a collaborative effort featuring military leaders; VA representatives; and CSUSB staff, faculty and student veterans to expand faculty training for successfully instructing and interacting with military-affiliated students.

### TIPS FOR ANALYZING SMALL POPULATIONS

A common challenge institutions face is analyzing data for small subpopulations on their campuses, for example, adult learners, bi-racial and multi-racial students, gender-variant students, and women of color in STEM. These groups are often marginalized on campus and their experiences can be lost in aggregate results. To support institutional efforts to analyze small populations we offer these considerations:

- Remember that descriptive studies and percentage differences are legitimate forms of analysis.
- Telling the story of a small population alone can be enough; comparison to the general population is not always needed.
- Be wary of diluting your results by clumping together small population groups to increase your counts.
- Before presenting findings on small populations, reset your audience's expectations.
- Think ahead to apply strategic recruitment efforts to survey your small populations.



To improve the transition experience both for students coming from high schools and for those transferring from community colleges, CSUSB's orientation programs have become transition programs—and NSSE data have been embedded in this change.

To support students of color from communities who have historically graduated at lower rates, CSUSB has recently opened three student success centers: the Pan-African Student Success Center, the LatinX Student Success Center, and the First People's Student Success Center. NSSE data along with Lumina, AAC&U, and institutional and systemwide data informed the need for these centers—as illustrated, for example, in CSU system's very low graduation rates for First Nations students. Increasing resources and support for all students will be central to CSUSB's work toward meeting the *Graduation Initiative 2025* goals.

Lastly, to improve the transition experience for both students coming from high schools and those transferring from community colleges, CSUSB's orientation programs have become *transition* programs—and NSSE data have been embedded in this change. The new student convocation, for example, incorporates NSSE data on students' engagement on campus and supplements this with student leaders sharing stories about their own engagement and encouraging new students to take advantage of campus support and resources. Given the many ways CSUSB is working to improve the student experience and increase engagement, its next NSSE administration will be important for assessing the impact of these strategies.

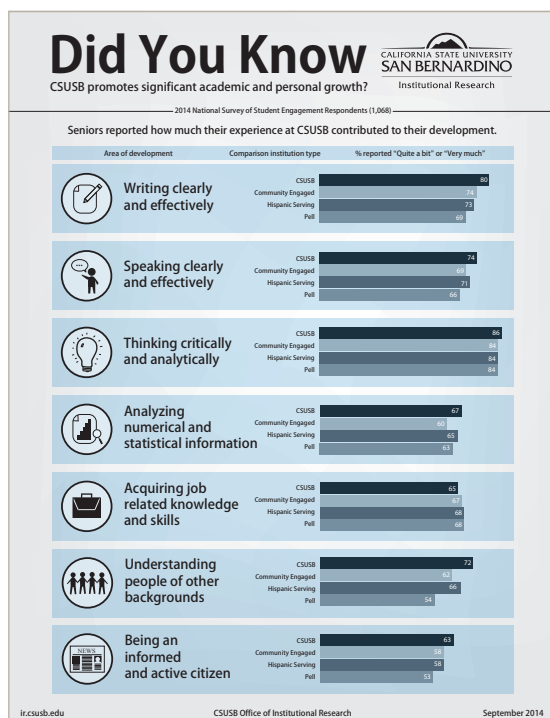


Figure 4. CSUSB Peer Group Comparisons on Perceived Gains Items

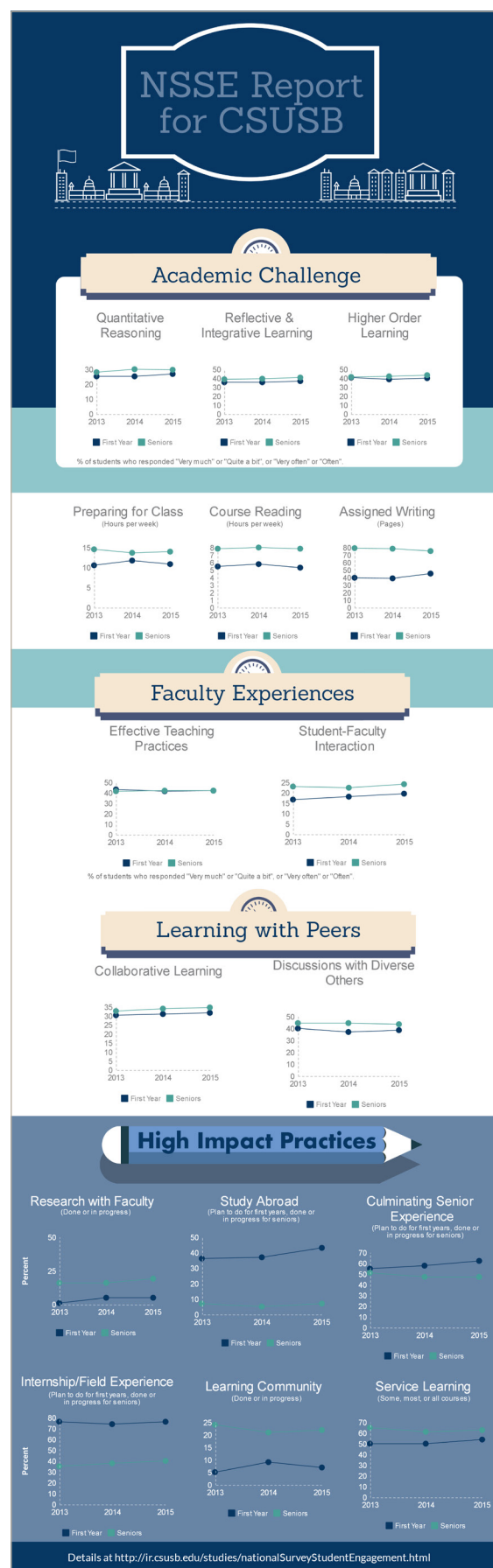


Figure 5. Infographic Summary of NSSE 2015 Results

# Strengthening Information Literacy Awareness and Skills

## UNIVERSITY OF SAN DIEGO

The evidence gleaned from the Experiences with Information Literacy Topical Module will strengthen USD's goal to equip students with knowledge and skills foundational to 21st-century higher education.

Information literacy has become a growing priority and a new core competency for the University of San Diego (USD), where it is recognized as a student learning outcome spanning all disciplines and critical to the success of all USD graduates. Information literacy is also emphasized in the Western Association of Schools and Colleges Senior College and University Commission (WSCUC) accreditation standards as a core competency that prepares students for future careers and life-long learning.

Therefore, in 2011, USD began core revision work for assessing students' progress in this area. The first step consisted of assessing the baseline level of students' information literacy skills. Subsequent pilot interventions sought faculty volunteers who worked closely with a librarian in an effort to demonstrate how various disciplines could incorporate information literacy into their courses. To raise faculty awareness of the need for information literacy training, these faculty-librarian teams assessed the strategies employed during the pilot stage.

In 2015, USD appended the Experiences with Information Literacy Topical Module to their NSSE administration. The module's findings served two main purposes. First, they represented a baseline for how students

perceived information literacy and responded to the institution's prioritizing of information literacy. Second, the findings could be used to encourage faculty and staff across the institution to recognize the importance of focusing on this area. For example, one module finding was that many first-year students did not perceive that key information literacy outcomes or skills were embedded in their courses. USD considered this problematic, as students should be developing these skills in all of their courses.

As follow-up interventions, USD librarians developed a set of curricular offerings to help faculty and their students acquire information literacy skills; USD core curriculum faculty incorporated the teaching of information literacy skills into the historical inquiry requirement; and, specifically to address the development of these skills in the first year, USD hired a writing director to work closely with librarians to ensure information literacy becomes a core piece of the first-year experience.

USD is also working with faculty to explicitly deepen students' awareness of the importance of gaining information literacy skills. For example, a faculty member in engineering identifies and describes information literacy skills to students as a part of the course and carves out time to articulate to students what to focus on to gain these skills by completing course assignments (e.g., research paper). When these connections are made explicit, students appear to be more engaged in the learning process. It is important to USD that faculty members as well as staff across the institution are involved—making increasing students' skills truly an institutional effort.

USD plans to implement the Experiences with Information Literacy Topical Module again to monitor progress in student awareness since designating information literacy an institutional core value. These results will also be incorporated into future accreditation reports in the discussion of WSCUC's five core competencies. The evidence gleaned from this NSSE module will strengthen USD's goal to equip students with the knowledge and skills foundational to 21st-century higher education.

### UPDATE ON NSSE TOPICAL MODULES

Since the introduction of NSSE's Topical Modules in 2013, more than 1,000 institutions have appended at least one module to their NSSE administration, using the results to generate and inform conversations among faculty, staff, and administrators with deeper, focused insight into key aspects of the student experience including academic advising, writing, transferable skills, and civic engagement. Since the publication of the previous volume of *Lessons from the Field*, NSSE has added these Topical Modules: First-Year Experiences and Senior Transitions, Global Learning, and Inclusiveness and Engagement with Cultural Diversity. NSSE will continue to develop additional modules on important topics related to student learning and development.

[nsse.indiana.edu/html/modules.cfm](http://nsse.indiana.edu/html/modules.cfm)



# BCSSE and NSSE Uses Embedded in the College Culture

## WILLIAM JEWELL COLLEGE

The college administered the Learning with Technology module and found changing levels of technology use in high school reported by first-year students over the last few years.

William Jewell College is an intimate college, in Liberty, MO, and a longtime participant in NSSE and BCSSE. Because of this long-standing commitment to the surveys, components of these instruments have been embedded in discussions about the curriculum, improving instructional practice, and in advising discussions. For example, stagnant senior scores on NSSE's Academic Challenge Engagement Indicator led to an initiative to disaggregate these data by major and to have conversations with academic departments to raise their awareness of the survey results. These conversations stimulated course-level adjustments within departments that resulted, in subsequent surveys, in seniors in most programs reporting higher scores on the Academic Challenge indicator.

The institution also uses BCSSE scores to facilitate relationship-building between the academic advisor and first-year advisee by asking them to discuss the differences in the first-year student's expectation of the college

experience and their high school experience and behaviors, corresponding with items on the BCSSE instrument. At William Jewell College, as at many similar institutions, faculty serve as advisors for students. BCSSE information provides guidance for faculty on how to best support students. Advisors are asked to pay particular attention to students who plan to spend less than 15 hours a week studying, more than 10 hours a week working, or more than 10 hours a week participating in co-curricular activities. They are also asked to pay attention to low self-ratings within the sections of Expected Transition Difficulty or Academic Perseverance.

William Jewell College also exemplifies how to use NSSE Topical Module data to guide curriculum development and resource allocation. Stakeholders at the institution leveraged data from the Experiences with Diverse Perspectives module to enhance a ten-year plan to increase campus structural diversity and interactions around diverse topics and to be more inclusive. Results from years of collecting data from this module indicated that students at the institution were less likely than the institution desired to engage in activities or to participate in conversations regarding societal differences. Although comparison showed that the institution's data were similar to the data of peer institutions, the college aimed for even better performance. As a result, the faculty approved adding a required common course on identity and society for all new students (starting Fall 2017) and requiring those students by the time of graduation to complete two approved diversity and inclusion courses (at least six credits), one on diversity in the US and the other on global diversity.

The college also administered the Learning with Technology module and found changing levels of technology use in high school reported by first-year students over the last few years. This information informs on-going changes in how the institution integrates digital resources, leverages a digital commons, and maximizes its one-on-one mobile initiative that provides all students an iPad. Educationally effective technology use has become so ubiquitous at the institution that Apple has designated William Jewell College a Distinguished School for its "innovation, leadership, and educational excellence."

William Jewell College



## Longstanding Commitment to Use NSSE Data in Many Ways

### INDIANA UNIVERSITY – PURDUE UNIVERSITY INDIANAPOLIS

**IUPUI has been administering NSSE since 2002 and NSSE data continue to be vital in shaping its conversations regarding student engagement and learning.**

Indiana University–Purdue University Indianapolis (IUPUI) has been administering NSSE since 2002. In its NSSE 2006 results, IUPUI's first-year students indicated they were less likely than students at peer institutions to report either serious conversations with students different from themselves or to include diverse perspectives in class discussions or writing assignments. These results informed curricular discussions on campus and led to the development of more Themed Learning Communities to create opportunities for students to discuss issues of diversity, inclusion, and equity.

At IUPUI, a Themed Learning Community (TLC) is comprised of a first-year seminar and two or more disciplinary courses in which a group of 25 freshmen co-enroll. Throughout a semester, the TLC group explores a theme, makes integrative connections between courses, and engages in out-of-class experiences guided by the TLC's faculty team. In 2016, IUPUI had 11 different TLCs focusing on diversity. Also in 2016, TLCs

formed a partnership with IUPUI's Diversity, Enrichment, and Achievement Program from which four new TLCs were created, in 2017, to support the success of students from populations traditionally underrepresented in higher education. To monitor the effectiveness of TLCs in helping students achieve institutional learning goals, IUPUI researchers have used NSSE data. In one report, NSSE items mapped to the institution's Principles of Undergraduate Learning (PULs) learning outcomes showed that TLC participants had higher scores than nonparticipants along these outcomes (see Figure 6).

In addition to advancing diversity, inclusion, and equity at the institution, IUPUI stakeholders are interested in increasing participation in and measuring the quality of High-Impact Practices (HIPs). One key campus initiative targeting this goal is RISE—Research, International experiences, Service-learning, and Experiential learning—which provides maps for students to enroll in RISE courses and resources for faculty (e.g., taxonomies and funding for course development). To measure the quality of RISE, the Office of Institutional Research and Decision Support uses retention data, follow-up surveys, qualitative interviews, and NSSE data. Triangulated with data from the other sources, NSSE data are used to illuminate the relationship between HIP participation and desired student outcomes. NSSE results have indicated that, among first-year and senior students, RISE participation is related to increases in engagement behaviors associated with Higher-Order Learning and Discussions with Diverse Others.

NSSE data continue to be vital in shaping conversations at IUPUI regarding student engagement and learning. Dynamic reporting from the Office of Institutional Research and Decision Support via Tableau data visualization software allows users to examine student HIP participation by (a) the total number of HIPs completed or (b) participation in a specific HIP (e.g., service-learning, undergraduate research, internships). Users can disaggregate the data by student characteristic (e.g., gender, race/ethnicity, full-time or part-time status) and by school within the university; they can also compare participation rates between IUPUI and peer institutions and other public research universities (see Figure 7).

Indiana University–Purdue University Indianapolis



IUPUI has historically used data to inform the creation of educational interventions, and the institution's ongoing innovation keeps data alive in present-day conversations about the institution's future.

This tool presents a data-rich way to inform educators skeptical of their department's contribution to low institutional participation numbers, those interested in how they “stack up” with peers, and those who want to ensure equitable HIP participation across different student groups.

Conversations about future initiatives at IUPUI have also drawn on NSSE data. For example, NSSE 2015 results informed discussions at the winter retreat of the nationally recognized IUPUI Center for Service and Learning (CSL). Specifically, discussing IUPUI's low scores (relative to those of peer institutions) on the

### The Principles of Undergraduate Learning, National Survey of Student Engagement and IUPUI Themed Learning Communities

National Survey of Student Engagement Mapped to IUPUI Principles of Undergraduate Learning (PULS): Themed Learning Community Students Have Significantly Higher Mean Ratings Compared to IUPUI Non-Participants and Selected Urban Peers  
(TLC N=80, IUPUI Comparison Group N=270).

PULS AND CORRESPONDING NSSE ITEM	TLC	IUPUI COMPARISON GROUP (NOT-TLC)	PEER INSTITUTIONS
<b>Integration &amp; Application of Knowledge</b>			
Worked on a paper or project that required integrating ideas or information from various sources.	3.45	3.08	3.04
Put together ideas or concepts from different courses when completing assignments or during class discussions.	2.84	2.60	2.55
<b>Understanding Society &amp; Culture</b>			
Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments.	3.10	2.69	2.85
Participated in a community-based project (e.g., service learning) as part of a regular course.	2.16	1.75	1.38
Institutional emphasis: Encouraging contact among students from different economic, social, and racial or ethnic backgrounds.	3.05	2.56	2.59
Institutional contribution: Understanding people of other racial and ethnic backgrounds.	2.89	2.56	2.78
<b>Intellectual Depth, Breadth &amp; Adaptiveness</b>			
Coursework emphasized: SYNTHESIZING and organizing ideas, information, or experiences into new, more complex interpretations and relationships.	3.14	2.91	2.79
<b>Core Communication &amp; Quantitative Skills</b>			
Institutional contribution: Writing clearly and effectively	3.19	2.98	2.88
<b>Critical Thinking</b>			
Institutional contribution: Thinking critically and analytically.	3.30	3.07	3.08
Coursework emphasized: ANALYZING the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components.	3.41	3.02	2.99

A: The IUPUI non-participant group includes students enrolled in First-Year Seminars, but not in TLCs. This was the most appropriate comparison group.

B: The mean is the weighted arithmetic average of student responses on a particular item. Means are provided by NSSE for IUPUI and all comparison groups. The TLC and IUPUI non-TLC means are not weighted.

C: The Selected Peers included University of Alabama at Birmingham, University of Colorado at Denver & Health Sciences Center, University of Wisconsin-Milwaukee, Virginia Commonwealth University, Wayne State University, and Wright State University.

Note: All response scales are based on a 1-4 point scale where 1 = “never” and 4 = “very often” or 1 = “very little” and 4 = “very much.”

Figure 6. The Principles of Undergraduate Learning, National Survey of Student Engagement and IUPUI Themed Learning Communities



The Carnegie Foundation's Community Engagement Classification identified IUPUI as one of the 240 engaged campuses in the US.

Diverse Interactions Engagement Indicator, CSL staff used Design Thinking strategies to better conceptualize how diversity affects their work and how reflection strategies might be used to enhance student development around diversity. CSL staff have also used data from the Deep Approaches to Learning Scales in their scholarly work on the relationship between participation in service-learning and deep approaches to learning. Data like these were used in the 2015 application for the Carnegie Foundation's Community Engagement Classification, which identified IUPUI as one of the 240 engaged campuses in the US. IUPUI has historically used data to inform the creation of educational interventions, and the institution's ongoing

innovation keeps data alive in present-day conversations about the institution's future. IUPUI continues to put NSSE results to good use. Over several NSSE administrations, both IUPUI senior and first-year respondents were more likely to indicate that they were working more than 20 hours per week off campus compared to similar students at peer institutions.

As a result, IUPUI plans to remain focused on several initiatives designed to encourage more students to work on campus. In the last 15 years, IUPUI has used NSSE data in comprehensive ways, from measuring achievements related to their PULs to informing needed conversations regarding campus diversity.

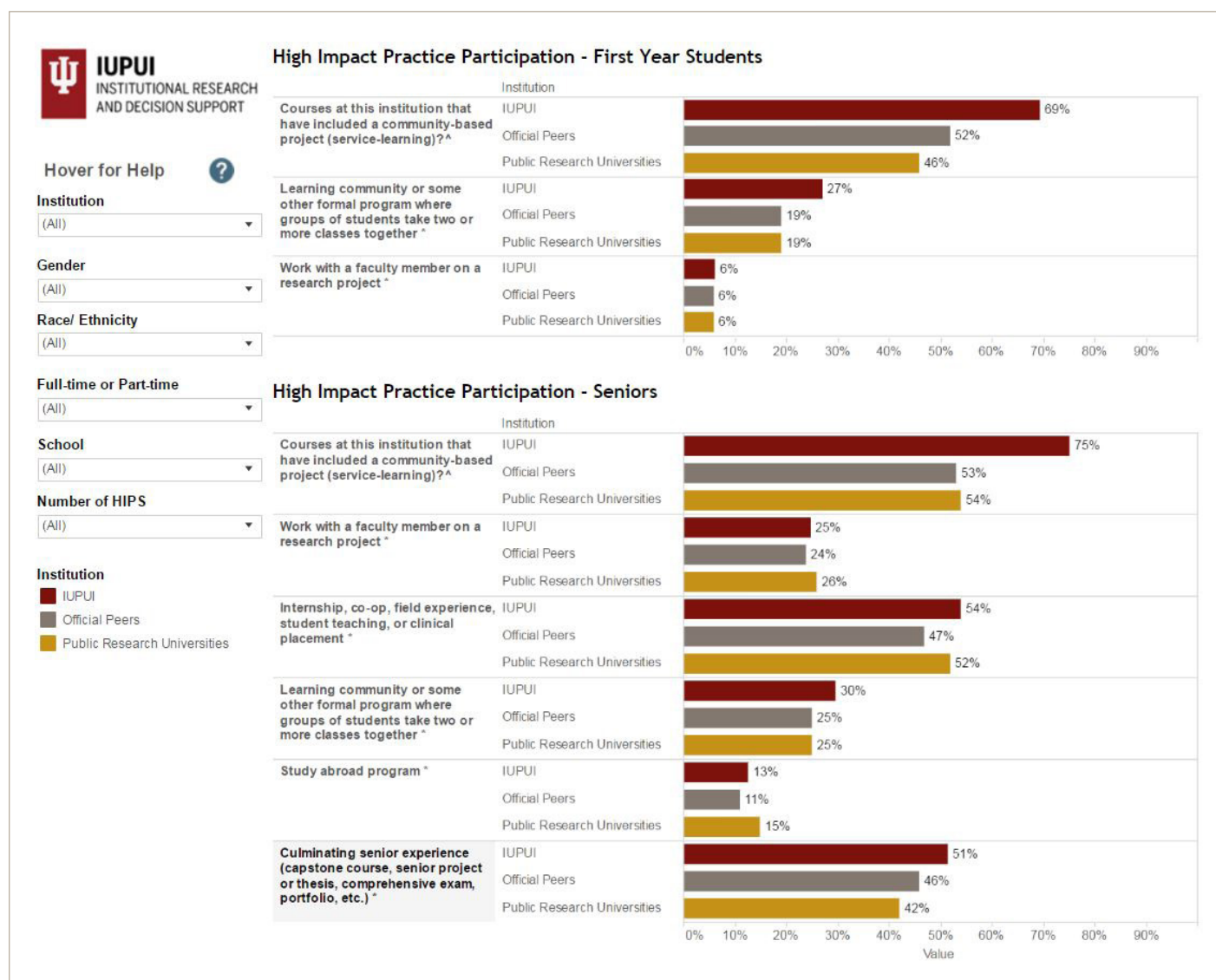


Figure 7. IUPUI HIP Participation Via Tableau Visualization Software

# Using Results to Incorporate Diversity on a Faith-Based Campus

## BIOLA UNIVERSITY

Using data from the various sources helped identify where students are exposed to diversity as well as opportunities to introduce diversity within the curriculum.

Results from Biola University's first administration of NSSE, in 2013, indicated lower scores than those of their peer groups on the Discussions with Diverse Others Engagement Indicator. For their administration of NSSE 2015, Biola intentionally customized their comparison groups and had similar findings—providing the basis for investigating further their students' engagement with individuals different from themselves. In an effort to fully understand these data, Biola conducted additional analyses including individual item analysis, disaggregating by race/ethnicity, and reviewing open-ended responses for diversity-related themes. Among the findings that stood out, compared to their peers at other faith-based institutions, Biola students scored lower on items querying the frequency of discussions with “people with religious beliefs other than your own” and “people with political views other than your own.”

Biola University



The NSSE findings were especially noteworthy given the responses of Biola students on the Taylor University Christian Life survey indicating that over 90% of them felt the institution had helped them connect their faith with culture and society. These potentially conflicting findings called for deeper probing, inspired new conversations on campus, and raised the question: What is Biola doing to prepare students to truly engage with culture and society, particularly with individuals who are different from them?

All of these findings were shared with the University Academic Council, which is chaired by the Provost and consists of academic deans and members of the Provost's cabinet, promoting a powerful campus discussion on how the institution was incorporating diversity into the curriculum. Using data from the various sources helped the council identify where students are exposed to diversity as well as opportunities to introduce diversity within the curriculum; for example, the council considered ways to incorporate diverse voices and texts in required theology courses. To encourage faculty to incorporate a more diverse curriculum, as part of Faculty Investment Day, faculty were offered a one-day training opportunity including breakout sessions and faculty panels with titles such as Teaching the Complex and Controversial: Practical Strategies for Engaging Students in Transformational Learning; The Black Lives Matter Movement, Evangelical Churches, and Biola Classrooms; Engaging Online Students in Cross-Cultural Learning; and Transforming the Classroom into a Real Life Experience: Engaging Students Cross-Culturally in the Community.

While Biola continues thinking about how to address the diversity-related NSSE findings on their campus, a staff member from the office of the Vice Provost of Inclusion and Cross-Cultural Engagement has been added to the undergraduate curriculum committee to help them critically examine how the curriculum addresses diversity. Biola also intends to continue the conversation about creating more opportunities for faculty training in pedagogy and inclusion in the classroom.

# Using BCSSE and NSSE Data to Inform Predictions and Improvements

## SOUTHERN CONNECTICUT STATE UNIVERSITY

**The results of the predictive models using BCSSE data indicated that student success is all about relationships.**

Every year since its inauguration in 2007, the Beginning College Survey of Student Engagement (BCSSE) has been administered at Southern Connecticut State University during orientation, and the institution has been pushing the boundaries of how colleges and universities use BCSSE data. As part of the First-Year Experience (FYE) Program, all incoming students are enrolled in a seminar that promotes their academic habits of mind, research skills, and preparedness for more advanced coursework. This seminar extends students' orientation into the future and guides them in developing action steps in the here-and-now to achieve their desired futures.

Prior to the first day of classes, the FYE seminar instructors receive a BCSSE Student Advising Report for each student, which provides individualized information regarding a student's commitment to the institution, expected academic difficulty, and self-perception of academic preparation for college. When guiding faculty on how to use this information to gauge a student's confidence and needs, the

Office of Assessment and Planning emphasizes that, rather than spelling out a student's destiny, BCSSE data provide a roadmap on how best to support the student during this crucial transition. At Southern Connecticut State University, the focus is on that which is amenable to change rather than unchangeable demographic characteristics and prior learning.

The Student Success Task Force, chaired by the Dean of the School of Arts and Sciences and the Vice President for Student Affairs, used BCSSE data along with other sources of data in predictive modeling to identify the most important predictors of student academic learning, persistence, and graduation outcomes. Of the information collected by BCSSE, the item "Do you expect to graduate from this institution?" was a significant predictor; not surprisingly, students who responded "Uncertain" were less likely to be retained compared with students who answered in the affirmative. Other important predictors included students' expected difficulty with time management; preparedness to speak clearly and effectively; and frequency of talking with a counselor, teacher, or other staff member about university or career plans.

More than this, the results of the predictive models using BCSSE data indicated that student success is all about relationships. The Student Success Task Force's recommendations led to the creation of the Academic Success Center and the modification of academic programs, policies, and instruction as part of a drive to advance a culture of student-centeredness at the university. Specifically to help students plan for the cost of education and manage their financial obligations, a new position was created: Coordinator of Student Financial Literacy and Advising.

BCSSE and NSSE data have been used at Southern Connecticut State University in numerous other ways as well. For example, using data from NSSE's Academic Advising Topical Module (along with other sources of information) to identify issues with the campus's advising practices, the institution implemented the Education Advisory Board's Student Success Collaborative advising platform, and university staff continue to use data from the advising module to evaluate this initiative. Additionally, analysis of BCSSE and NSSE data trends conducted by the Office

Southern Connecticut State University





**BCSSE and NSSE results contribute to the university's data-driven process of educational change and, in response, the university changes the way it works on behalf of students.**

of Assessment and Planning underscored the importance of paying attention to the specific needs of students who are the first in their families to attend college.

One outcome from this analysis was the implementation of a special High-Impact Practice offering, First-Generation College Student Living and Learning Communities, whose students are enrolled together in focused FYE seminars and live together in dorms and with staff members who themselves had been first-generation college students. This program has had real success. First-generation students who participated in this High-Impact Practice had the highest score on the NSSE item measuring students' overall evaluation of their entire educational experience at the institution, and they were almost 10% more likely than their nonparticipating counterparts to persist at the institution.

Southern Connecticut State University is currently considering the factors that promote and impede on-time graduation. The most important predictors of on-time graduation include the characteristics of the students'

incoming profile, the students' goal-directed activities, their confidence that they would seek and identify additional resources to better understand course-related materials, and their expected difficulty in getting help if they are struggling with coursework. Results from BCSSE and NSSE can provide data illuminating these predictors.

Overall, BCSSE and NSSE results inform important conversations at Southern Connecticut State University about the most effective ways to promote students' learning and development. Infographics depicting key survey findings and important predictors of student success are used to spark discussions during meetings. BCSSE and NSSE data highlight areas in which the university has scored higher than its peer institutions—particularly in the Discussions with Diverse Others and Student-Faculty Interaction Engagement Indicators—and the data also identify areas in need of improvement. BCSSE and NSSE results contribute to the university's data-driven process of educational change and, in response, the university changes the way it works on behalf of students.

### TIPS FOR INCREASING NSSE DATA USE IN STUDENT AFFAIRS

To maximize the ways NSSE informs practice, we encourage institutions to expand the groups of users of NSSE data on their campuses. Student affairs professionals, for example, are often an untapped resource when it comes to examining NSSE data and using findings to promote student success.

NSSE items represent empirically confirmed best practices, and their results can be used to inform decision making and practices within student affairs units. To encourage NSSE data use among student affairs professionals, we offer these considerations:

- Identify which NSSE items give insight into critical aspects of student life including time spent on various activities (e.g., co-curricular activities), participation in High-Impact Practices, and percentage of students holding a formal leadership role.
- Use NSSE to assess campus strategic goals and program effectiveness through the survey's questions about student behavior and perceptions. For example, to what extent do you work with peers in and outside of class on projects? To what extent does your institution emphasize providing support to be involved socially?
- Use NSSE to get a deeper look within student affairs functional areas. For example, Career Services may be interested in the proportion of students engaging in internship experiences, or Residence Life can examine engagement differences between students living on and off campus.
- Disaggregate findings by important student characteristics such as racial/ethnic identity, gender identity, and first-generation status.

The NSSE Item Campuswide Mapping document might prove useful in identifying which NSSE survey items are of interest to various departments, units, and committees at your institution.

[nsse.indiana.edu/pdf/NSSE\\_Item\\_Campuswide\\_Mapping.pdf](https://nsse.indiana.edu/pdf/NSSE_Item_Campuswide_Mapping.pdf)

# Blueprint for Maximizing Participation and Data Use

## UNIVERSITY OF HAWAI'I AT MĀNOA

All of these efforts of putting NSSE data into users' hands and linking data with program improvements provides the Mānoa community with a better understanding and appreciation of the importance and usefulness of NSSE results.

The University of Hawai'i at Mānoa exemplifies how investing in student buy-in to raise response rates and creating innovative tools to inform and engage users enable an institution to get the most out of its National Survey of Student Engagement (NSSE) data. The Mānoa Institutional Research Office (MIRO) shifted from its past supporting role in producing NSSE reports to a proactive role in leading campus efforts to improve the NSSE response rate. Its focus now is on efforts to use NSSE data to support improvements in key areas. As part of MIRO's follow-up research and the creation of an action plan, a cross-functional team will attend the second annual National Institute for Teaching and Learning, where participating campus teams will develop evidence-based action plans aimed at improving instructional practices, student engagement, and student learning and success. In an attempt to get NSSE data into the hands of those who can use the information to inform decision making, MIRO has reached out to campus units through strategies such as customized reports, online interactive data reporting tools, video tutorials, and face-to-face discussions and training.

For NSSE 2015, MIRO carried out a comprehensive marketing strategy that included several key steps to promote survey participation among first-year and senior students. First, the office coordinated campus-wide advertisements for the survey on dozens of banners and boards as well as hundreds of flyers in first-year and senior residence halls. Second, based on research on the relationship between the use of incentives and increases in response rates, rewards for participants were offered through a drawing for prizes such as an iPad Air 2 and 20 bookstore gift cards. Third, student resources with information about the survey were provided, including a landing page on the MIRO website featuring frequently asked questions such as: "What is the National Survey of Student Engagement (NSSE)?" and "Why should I take part?" The office also organized

visits to some of the largest first-year classes to present information about the survey and to encourage participation.

On days when the survey was being administered, information tables were staffed around campus—a service coordinated by student members of the American Marketing Association. With the currency of social exchange as the guiding principle, students were offered snacks and pens with NSSE information notes as they gained awareness about the survey. Prior to the survey administration, MIRO presented its marketing plans to the academic deans, who in turn supported the effort by advertising the survey in their buildings, hosting survey administration parties, doing their own tabling for the survey, and encouraging faculty to promote the survey. Finally, during administration, advertisements were updated to include the end date of the survey period, thereby reminding students to complete the survey before the deadline. To better understand the effectiveness of those promotion strategies, MIRO entered survey response rate data on a daily basis and used the NSSE interface to track changes in response rates.

It was clear that the efforts put forth by MIRO paid off. Compared to the 2011 administration of NSSE at the University of Hawai'i at Mānoa, response rates for NSSE 2015 doubled from 16% to 32%. Closing the loop on this project, MIRO posted an online video showing the steps taken to improve survey participation and the university's favorable response rate compared with those of other institutions. MIRO also compared NSSE responses with enrollment data to demonstrate that the survey sample adequately represented the overall student population along the characteristics of class standing, gender and race. This final comparison can (a) persuade skeptics of the representativeness of information derived from NSSE and (b) provide strong evidence of the success of campus partners in promoting the survey. These efforts complement other efforts of MIRO to expand access to NSSE data.

MIRO has also created innovative ways to disseminate NSSE findings to different academic units and offices on campus to enhance their capacity for data-based decision making. Outreach efforts include developing interactive data tools to help departments and academic

University of Hawai'i at Mānoa



**The university's institutional research office serves as an excellent resource in assuring that the educational practice and policy decisions of individual units are informed by NSSE information and data.**

units access NSSE data and conduct data mining in ways that answer specific questions about student engagement. Central to the design and functionality of the web apps that MIRO developed for NSSE data is the ability to “slice and dice” the data based on one or more variables (e.g., gender, race/ethnicity, college, department and many others). The visually appealing report designs enable users to quickly identify data trends. The office also created customized presentations and video reports for student affairs and academic affairs units to focus on three aspects of student engagement: supportive environment, diverse perspectives and student accountability. In addition, MIRO hosted face-to-face training sessions on how to use NSSE data (eight sessions in one semester) and developed virtual tools that include video tutorials, scenarios for use, and follow-up surveys. These tools and data sharing strategies have garnered positive feedback from various offices on campus. By placing data into users’ hands, creative ways of using data to drive decisions have become possible.

To gain a better understanding of one of the areas identified for improvement, MIRO administered a follow-up survey, in July 2016, consisting of five open-ended questions looking at different perspectives of the University of Hawai'i at Mānoa's supportive environment. Nearly 1,800 students responded, generating nearly 9,000 total responses. MIRO created an interactive online reporting tool allowing decision makers to quickly locate students’ responses from different student populations on specific issues and campus services. These

qualitative results provided critical and meaningful information from student voices. To generate real campus change using NSSE results, in August 2016, MIRO's director led a cross-functional Mānoa team at the National Institute for Teaching and Learning, where they used data from NSSE and the supportive environment survey to develop an action plan to enhance the university's supportive environment for student success.

All of these efforts to put NSSE data into users’ hands and to link data with program improvements provides the Mānoa community with a better understanding and appreciation of the importance and usefulness of NSSE results. With increased awareness, the University of Hawai'i at Mānoa is likely to enjoy an even more desirable NSSE response rate in the next administration period, which will bring more NSSE data to use for campus decision makers. This healthy and sustainable process works and can be replicated at other institutions.

While recognizing that individual units are in charge of making changes in their educational practice and policy, the institutional research office at the University of Hawai'i at Mānoa serves as an excellent resource in assuring these decisions are informed by NSSE data. Its investment in both the participation and the data use aspects of survey research provides a blueprint for how users can maximize NSSE data to better serve their students.



# Mapping NSSE Items and Developing Faculty

## CARLOW UNIVERSITY

**In these uses of NSSE data, Carlow University has done outstanding work using specific data points in the survey results to guide interventions.**

The Office of Institutional Research, Effectiveness, and Planning at Carlow University maximizes information derived from NSSE results by using data from both the core survey and the Topical Modules. In 2014, Carlow administered NSSE and participated in two modules: Learning with Technology and Experiences with Information Literacy. Analysis of these data contributed to the development of explicit guidelines for a new core curriculum and the improvement of instruction by faculty.

Mapping Carlow's NSSE results to specific action steps was linked to the new core curriculum guidelines. For example, in one document the survey item, "worked with a faculty member on activities other than coursework" was connected to actions such as educating students about co-curricular opportunities in the "Connecting to Carlow" course and the development of a co-curricular transcript. The Office of Institutional Research, Effectiveness, and Planning developed a graphically enhanced chart that (a) identified the NSSE survey item, (b) compared Carlow's performance with the national average (e.g., a "thumbs up/neutral sign/thumbs down" picture), and (c) listed all of the new core curriculum components intended to ameliorate the concerning findings.

By reimagining NSSE results in a single chart—or "crosswalk"—the office developed an easy-to-understand information display tool that clearly delineated connections between data and action. For example, low NSSE scores from seniors for faculty feedback on a draft or work in progress were addressed by creating various skill labs (i.e., academic support experiences to help students develop communication, writing, and quantitative reasoning skills), by implementing a writing-intensive curriculum in the critical exploration courses, and by embedding assessment checkpoints during junior year seminars.

Because NSSE results also indicated participation rates in some High-Impact Practices (HIPs) were lower at Carlow than at other institutions, an action step called for the inclusion of five HIPs in the core curriculum (writing intensive curriculum, capstone courses, service-learning experiences, internships, and research opportunities with faculty). Although several of these HIPs were already in the curriculum, a conscious decision was made to bolster and expand them in the new curriculum. Not only has the crosswalk streamlined conversations regarding interventions to enhance student engagement, the document also serves as an easy-to-reference guide for measuring the effectiveness of these interventions.

Carlow University plans to administer NSSE in 2018 and is excited to see if scores on the targeted items improve after implementing the new core curriculum, the Carlow Compass (see Figure 8). The Carlow Compass Curriculum, which went into effect for all incoming students in Fall 2016, is an innovative general education curriculum rooted in the liberal arts and the Catholic intellectual tradition. Serving as a navigational tool to guide students toward academic and professional goals, it is integrated with a student's major course of study and aligns with the university's mission, vision, and Mercy heritage.

Carlow University also used NSSE results to support and guide strategic priorities in other areas of the academic enterprise. While excelling in many aspects of student engagement and practice, Carlow obtained results from NSSE's Learning with Technology Topical Module indicating it lagged behind its peers in integrating technology into undergraduate education. In the module, students are asked about the degree to which technology contributed to their learning activities such as understanding course ideas and

Carlow University



These steps have been essential to understanding how to improve student engagement and linking this understanding to actual intervention.

collaborating with other students. The module also includes questions regarding the types of technologies used in class and the degree to which the student's institution emphasized various types of technologies. The module results indicated that Carlow students were less likely to use certain technologies inside the classroom (e.g., electronic textbooks, e-portfolios, social networking) compared with students at other institutions participating in the module.

As a follow-up action, Carlow organized an internal professional development institute for all faculty and staff in spring 2016. The institute's theme—Back to the Future: Carlow's Journey of Innovative Technology—focused on sharing faculty successes at implementing technology as a way to inform and motivate late adopters. The institute included a plenary event, three hours of multiple training sessions (topics included Interactive Software Adobe Connect and Camtasia, and Engagement and Motivation through Digital Tools), and an open-house

session during the reception where faculty showcased their technology skills.

In both of these uses of NSSE data—the crosswalk of NSSE items with action steps for the new core curriculum and the examination of student use of technology in the classroom—Carlow University has done outstanding work using specific data points in the survey results to guide interventions. Furthermore, the Director of Assessment for Institutional Research, Effectiveness, and Planning has diligently mapped these items to specific interventions (either in changes to the core or to the professional development opportunity). These steps have been essential to understanding how to improve student engagement and to linking this understanding to actual intervention. Going forward, to evaluate the results of its interventions, Carlow can use data from their future administrations to either prove the effectiveness of these actions or to develop new strategies to enhance these measured outcomes.



Figure 8. Carlow University Compass Curriculum

## Investing All Units and Faculty in Using Results

### OKLAHOMA STATE UNIVERSITY

**OSU is committed to finding new uses of NSSE data and to reaching a broader range of faculty with college-specific resources and support.**

Like many institutions, Oklahoma State University (OSU) is challenged by decentralization. This has complicated its efforts to disseminate NSSE data and reports and to implement change. In the past, although the university's assessment office provided an executive summary report of NSSE results to various offices and academic colleges, this report was not consistently helpful because its broad findings were not specific to the units' various needs and students.

The assessment office has since prioritized providing each unit with data pertinent to that unit's work and the students it serves. The office has also developed resources to make data more accessible to faculty and staff across campus, including a new internal OSU website, dedicated to data and reports, that provides links to NSSE resources and information on accessing the NSSE Report Builder.

Getting faculty more invested in using NSSE results has also been a priority at OSU. In this effort, the assessment office has made it easier for faculty to access NSSE data for their own

research endeavors. For example, two faculty members are comparing the engagement levels of in-state students who received need-based state-sponsored scholarships and those who did not.

Additionally, working with the Institute for Teaching and Learning Excellence (ITLE), the assessment office has helped inform faculty workshops on using NSSE results. In a meeting with the ITLE's support unit of instructional designers and various faculty members, for example, the assessment office provided a two-and-a-half-hour presentation on the implications of NSSE findings for faculty practice at OSU. The presentation included an overview of NSSE, information about the university's recent NSSE response rates and respondent demographics, details about OSU's selected comparison groups, and descriptions of areas of strength and areas for potential improvement. The presentation also included findings from Topical Modules and from BCSSE. The goal of the presentation was to identify what faculty were doing in their classrooms related to student engagement and what they could do to enhance it. One critical area of faculty practice that was identified correlates with NSSE's Higher-Order Learning Engagement Indicator.

Since that presentation to ITLE, enhancing students' higher-order learning across campus has become a focus at OSU. For example, among the newly developed ITLE faculty courses, which are hybrid in-person and online workshops, one of the courses focuses on more thoughtfully matching student needs with teaching methods; more deeply engaging students in content through activities that highlight analysis, application, and evaluation skills; and more closely aligning content assessments to teaching practices so that evaluation is more relevant and reliable. As evidence of this ITLE course's impact, a chemical engineering faculty member who completed the course has converted his lecture-based course into a course incorporating guided problem-solving tasks with embedded informal, formative assessments that allow him to gauge student learning immediately and to make adjustments where necessary.

OSU is committed to finding new uses of NSSE data and to reaching a broader range of faculty with college-specific resources and support.

### UPDATE ON THE ANNUAL TEACHING AND LEARNING NATIONAL INSTITUTE

How can campuses use evidence of students' educational experiences to improve learning and success? Putting NSSE data to use to respond to this question was a key theme of the Teaching and Learning National Institute (TLNI), hosted by The Evergreen State College in summer 2016.

Teams of faculty, student affairs professionals, institutional researchers, and administrators from 29 two-year and four-year institutions focused on using evidence to identify areas of the student experience that could be strengthened and then—building on what is known about successful practices—to shape more effective approaches both in the classroom and outside the classroom.

Co-sponsored by NSSE, the Washington Center at the Evergreen State College, the Washington State Board for Community and Technical Colleges, the National Institute for Learning Outcomes Assessment, and Achieving the Dream, the Second Annual TLNI was held in summer 2017. [nsse.indiana.edu/html/workshops\\_2016\\_evergreen.cfm](http://nsse.indiana.edu/html/workshops_2016_evergreen.cfm)



# Student Learning Analysts Build Campus Interest and Investment in Assessment

## BOWLING GREEN STATE UNIVERSITY

Incorporating students' interpretation of data and recommendations for practice can have a significant impact on campus unit decisions.

Using assessment data innovatively at Bowling Green State University (BGSU) has become a priority in the last few years. To aid in this effort, in 2016, the Office of Academic Assessment created the Student Learning Analysts (SLA) position, "in which undergraduate students take an active role in gathering information on student learning experiences," to help ensure student voices are truly represented in the assessment of student learning—including in the interpretation of the data and the recommendations for practice. Students in the SLA position learn to design assessment projects, collect and analyze data, and present findings to various members of the BGSU community. The Vice Provost of Institutional Effectiveness and Associate Director of Academic Assessment,

who work with these students, believe the SLAs support the larger data-driven philosophy on campus and increase investment by campus units in institutional assessment work. Incorporating students' interpretation of data and recommendations for practice can have a significant impact on campus unit decisions.

Students hired for the SLA program were drawn from a variety of majors, class standings, and experience levels—but all demonstrated an interest in assessment and student learning. After receiving training in assessment techniques, the SLAs started their projects. In their first semester, they conducted focus groups related to students' expectations about learning and engagement in the classroom (see Figure 9). In their second semester, as they developed assessment projects directly related to NSSE, they learned about engagement and the types of data NSSE provides—and used these new skills to craft focus group questions related to three NSSE Engagement Indicators: Learning Strategies, Higher-Order Learning, and Reflective and Integrative Learning. One of the focus group questions related to Learning Strategies was "How do you study and review your notes?" Another question, related to Higher-Order Learning, was "How is critical thinking applicable in other aspects, such as internship, organizations, etc.?" In a question related to Reflective and Integrative Learning, the SLAs asked "Explain how your classes help you look at issues or topics with a new perspective." Following the focus groups, the SLAs analyzed and coded their data and began to identify findings to share with various groups on campus (e.g., Teaching and Learning Fair, General Education Committee, Faculty Administrator groups, etc.). The SLAs are also committed to finding unique visual ways to share their findings to make them as accessible as possible.

Although still new, the SLA program has already seen some unintended—but positive—outcomes. Students who participated in the focus groups, for example, have expressed interest in the SLAs' assessment work and are thinking about how they can use assessment to inform their own experiences (e.g., activities with student organizations). To build on this growing interest, the Office of Academic Assessment at BGSU is considering ways to expand the SLA program in the future after ensuring its short-term success.



Figure 9. Student Learning Analysts' Engagement in the Classroom Focus Groups Summary

# NSSE Data-Informed HIP Planning and Accreditation Reporting

## CALIFORNIA STATE UNIVERSITY SAN MARCOS

**CSUSM is making progress toward establishing a culture of data to inform action and to demonstrate student learning outcomes.**

California State University San Marcos (CSUSM) is a Hispanic-Serving Institution that is focused on the students they serve, an undergraduate population among whom 42% identify as Latino/a, 54% are first-generation, and 47% come from low-income backgrounds. Institutional researchers at CSUSM use NSSE data to learn more about their student population and to provide evidence that can be used to best serve them—for example, to confirm that CSUSM students spend more hours working for pay than do students at similar institutions. Findings like this inform the collective understanding of the student population and guide campus conversations on how to best support these students.

NSSE data are also used to underpin efforts like the benchmarking of Co-Curricular Competencies conducted annually by the Division of Student Affairs. The division reorganizes data from NSSE and from the Cooperative Institutional Research Program (CIRP) College Senior Survey under domains such as Civic Engagement and Social Responsibility or Critical Thinking and Ethical Reasoning, using the data to inform conversations regarding student learning in these areas.

High-Impact Practices (HIPs) such as the first-year seminar, internships, and undergraduate research are a leading priority at CSUSM. Emblematic of this institutional emphasis, a HIP task force composed of faculty, staff, and administrators with interest or involvement in campus HIPs used NSSE data to disaggregate student participation in these practices by student major and demographic characteristics. These data can help educators identify student groups that are less likely to participate in HIPs and to direct them to HIP opportunities—interventions that are especially impactful for students such as first-generation or low-income students who might not otherwise seek out these opportunities.

CSUSM stakeholders have used NSSE data to measure the overall effect of efforts to improve HIP participation, and the data suggest interventions like these are working. Encouragingly, results from the institution's NSSE 2016 administration indicated that HIP participation has increased. Also, using common data reference points has facilitated cross-division collaboration at the university, as all entities work from the same data points and share a common framework for conversations to identify needs and plan interventions.

NSSE data have also played an important role in the CSUSM WASC Senior College and University Commission (WASC) accreditation process—providing evidence in their institutional report of achievements in university-wide Undergraduate Learning Outcomes (ULOs), mapped to WASC standards. For example, CSUSM found that their students were more likely than those at other California State University institutions to engage in behaviors associated with higher-order learning and used this information to articulate the ways in which their students had developed skills as Comprehensive and Critical Thinkers (one of the four ULOs). Similarly, for the Skilled Communicators ULOs, the institutional report noted high scores for the frequency at which students give presentations in class and for crediting their university experience for the development of oral communication skills. Lastly, the CSUSM institutional report used NSSE data to illustrate high levels of satisfaction among students.

In concert with other data sources, such as CIRP's freshman and senior surveys and the American College Health Association–National College Health Assessment survey, CSUSM expertly aligned their own institution's ULOs with WASC standards and used evidence from NSSE to highlight achievements in student learning on their campus. CSUSM is making progress toward establishing a culture of data to inform action and to demonstrate student learning outcomes.

# Developing and Assessing Opportunities for Entrepreneurial Learning

## ROSE-HULMAN INSTITUTE OF TECHNOLOGY

Working to be more intentional in how data are shared across campus, Rose-Hulman used the Report Builder to break down the findings by specific engineering majors.

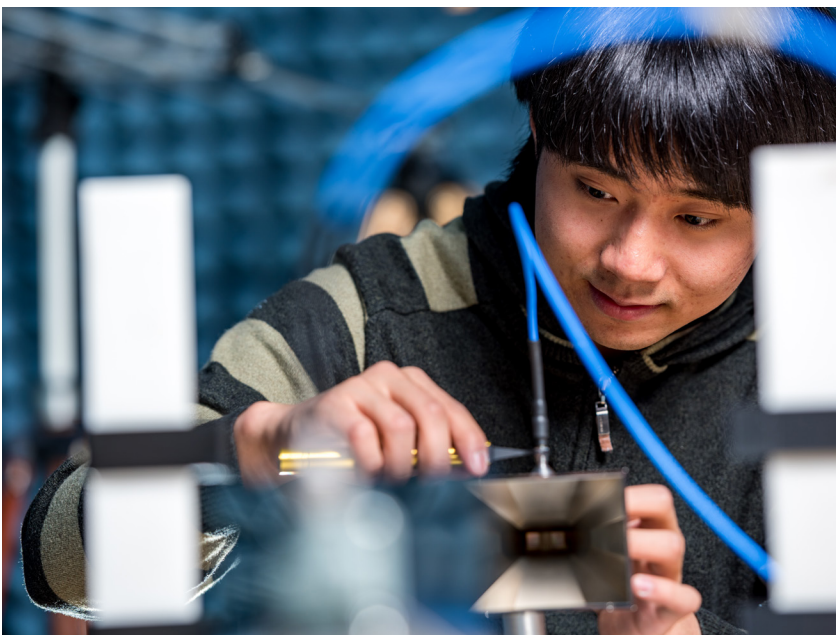
In 2014, Rose-Hulman Institute of Technology received a grant from the Kern Family Foundation as part of the Kern Entrepreneurial Engineering Network to develop for engineering students entrepreneurial minded learning (EML) opportunities that foster an entrepreneurial mindset and enterprising attitudes. Rose-Hulman President James Conwell said that the grant—combined with the goals and mission of the institution—would play an important role in preparing graduates to positively contribute to the American workforce. This grant has supported a number of educational initiatives at Rose-Hulman, such as engaging faculty in multidisciplinary groups to create EML-infused courses in each academic discipline, including the humanities and social sciences. Rose-Hulman has also developed a new living-learning community, the Engineering Student Community Actively Learning Advanced Technical Entrepreneurship (ESCALATE), in which 50 first-year students who live and take courses together are connected to student and alumni mentors.

Rose-Hulman Institute of Technology

To assess the impact of their efforts to infuse EML initiatives throughout the institution both in and outside the classroom, in their NSSE 2015 administration, Rose-Hulman appended the First-Year Experiences and Senior Transitions Topical Module. A number of items in this module were identified as having the potential to measure progress toward EML goals—particularly, in the senior students' section of the module, the items related to entrepreneurial skills, self-employment, and starting your own business. The module findings are serving as benchmarks as Rose-Hulman extends EML initiatives across the institution, with plans to readminister the module in 2018.

Rather than wait for the 2018 data for longitudinal comparisons, however, Rose-Hulman chose to use the existing data to examine what was already happening on their campus. Results from the module's first-year experience section, for example, gave insight into the impact of College and Life Skills—a course designed to help first-year students make a smooth transition from high school and to introduce them to important resources and individuals at Rose-Hulman. Compared to first-year students at peer institutions, the results showed that Rose-Hulman students were much more likely to seek additional information for course assignments when they didn't understand the material and to ask instructors for help when they struggled with course assignments.

Rose-Hulman has also been working to be more intentional in how data are shared across campus. For example, to address some challenges in using the Major Field Report as a small institution with most students in engineering programs, Rose-Hulman used the Report Builder–Institution Version to break down the findings by specific engineering majors. Each academic program received its own individualized report including institution-wide findings, departmental findings, departmental comparisons to other U.S. institutions, and data use resources. Supporting greater use of NSSE results at the program-level and outlining a plan to employ student engagement results to monitor the infusion of EML have been effective approaches for making data use more widespread at Rose-Hulman.





## Data Visualization to Excite Interest in HIPs and Their Benefits

### UNIVERSITY OF TORONTO

This succinct data display creates an enticing narrative for stakeholders to articulate the value of these educational programs.

Communications, assessment, and senior leadership from the Division of Student Life at the University of Toronto (U of T) seek to share information on the success and influence of the university's educational programs. Although increasing student participation in High-Impact Practices (HIPs) is a major goal for the institution, presenting data in a way that inspires interest and change among educational units has been challenging. Through new, compelling data visualization techniques, however, NSSE data have been used to show the relationship between

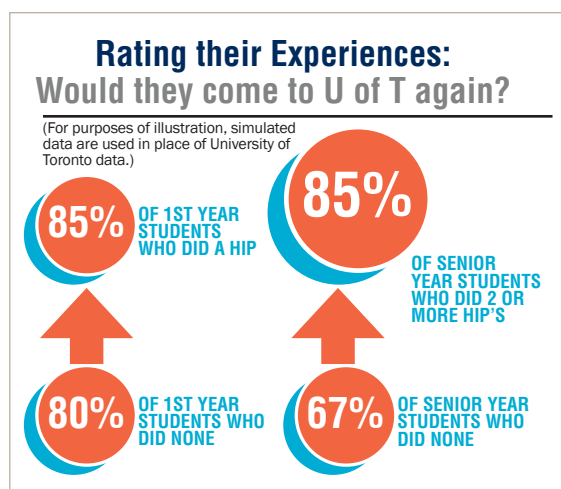


Figure 10. Relationship of HIP Participation and Satisfaction with U of T

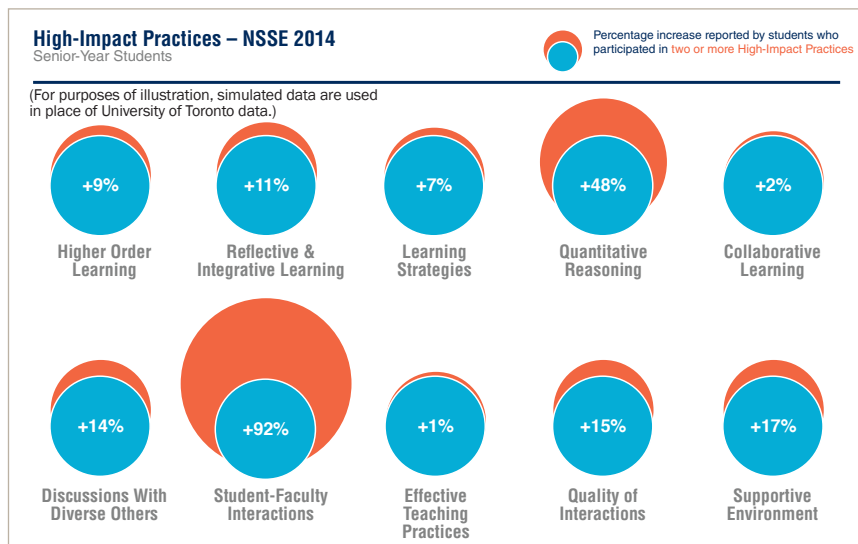


Figure 11. Relationship of HIP Participation and NSSE Engagement Indicators

participation in HIPs with student satisfaction and engagement and to generate interest in and conversation about HIPs across campus.

Figure 10 links HIP participation to responses to the survey question, "If you could start over again, would you go to the same institution you are now attending?" Results indicated a small increase in affirmative responses among first-year students who participated in one HIP (5%). However, the affirmative increase among seniors who participated in at least two HIPs was substantial (18%) compared to seniors who participated in none. Simply put, seniors who participated in at least two HIPs were more satisfied with their university than those who did not participate at all in HIPs. Reimagining these data in a new, succinct display allows educators to clearly understand this relationship and creates an enticing narrative for stakeholders to articulate the value of these educational programs.

Figure 11 displays more detailed differences in engagement between seniors who participated in at least two HIPs and those who did not participate in a HIP. The results of this analysis indicate increases in each of the ten NSSE Engagement Indicators for seniors who participated in HIPs, particularly in areas of student-faculty interaction, collaborative learning, and quantitative reasoning. The layout of this display is easy to grasp and clearly communicates the message that students who participate in HIPs are more engaged than those who do not. Also, the image allows the viewer to easily understand the degree to which HIP participation increases student engagement for each of the indicators. This neat and simple graphic of a seemingly complex relationship clarifies a key point: Students who participate in HIPs are more engaged.

With design support from their communications team, senior leaders in the Division of Student Life at the University of Toronto have shared these visualizations and data across the university—with individual departments, faculty members, registrar staff, librarians, and student life staff. As a result of these new data formats, campus conversations about the implementation of HIPs have grown broad and deep. The visualization of these data present a robust case for the importance of HIPs, moving educators past "Why do them?" to "How can we best do them?"

## Quick Takes

### Data-Infused Campus Conversations About the Needs of Diverse Student Populations

#### UNIVERSITY OF MINNESOTA DULUTH

Every summer and January, in preparation for the upcoming term, the University of Minnesota Duluth (UMD) Division of Student Life holds a retreat for the division directors on a topic both related to the goals of the institution and applicable to the work of the division's departments and programs—student activities, recreational outdoor sports, student conduct, housing and residence life, diversity and inclusion, and others. In 2016, the retreat included a common reading of *Diverse Millennial Students in College: Implications for Faculty and Student Affairs* (Bonner, Marbley, & Howard-Hamilton, 2011) and conversations about how these implications related to students at UMD, identifying areas where UMD was successfully meeting the needs of its

various student populations and where it might be having some difficulty. Infused into these conversations were UMD's NSSE 2014 results—with a focus on data related to retention and student success, particularly for students of color. Important findings included the following: UMD's first-year students of color rated their interaction with staff lower than did their peers at other institutions; first-year female students were more likely to utilize academic support resources than were their male peers; and senior students of color had more outside responsibilities (work, family, etc.) potentially impacting their ability to manage academic commitments than did their peers in other racial-ethnic groups.

These data elicited a number of questions: Is the Division of Student Life doing all it can to proactively meet the needs of diverse populations of students? How should the division retool its approach to recruiting and retaining students of color? Further, how is the division creating a positive environment for all students? At UMD, these questions are being actively considered as the campus's student population grows increasingly diverse.

With a recent plateau in enrollment after a decade of steady enrollment growth, UMD recognizes that it cannot wait for students to tell the institution what they need. Instead, UMD must adjust its practices to provide a high-quality equitable experience for all students on campus. Moving forward, UMD plans to continue infusing NSSE data into its campus conversations, with the intention of making evidence-based decisions to improve practice.

### Creating Specialized NSSE Reports

#### UNIVERSITY OF NEBRASKA-LINCOLN

In an effort to reimagine how NSSE data are shared by distilling actionable and tangible findings from the survey, the Office of Academic Affairs at the University of Nebraska-Lincoln (UNL) reorganized the institution's NSSE data into four UNL Brief Reports: one for instructors; one for student support services; and one each with results from the Global Learning and the Experiences with Diverse Perspectives Topical Modules. Each report contains an overview of NSSE, a description of strengths within the institution, identified areas for improvement, and a conclusion. What makes this effort so innovative is how these reports are specialized for each audience.

The report for instructors includes findings related to teaching such as (a) engagement indicators regarding student-faculty interaction, effective

teaching, and quality of interactions; (b) student behaviors related to reading and writing; and (c) the degree to which students engage in discussions with diverse others or perceive the campus environment as supportive. Among the highlighted strengths in results for the three Engagement Indicators are the higher means for UNL seniors compared to seniors from other Big Ten and Regents institutions.

The instructors' report also includes "A Closer Look," a section in which UNL's item-level successes are detailed (for example, the 6% increase in first-year students who reported "talking about career plans with a faculty member," compared with first-year students at peer institutions). The report provides a similar granular look at the areas for improvement, as first-year students

reported significantly lower levels related to whether or not instructors (a) clearly explained course goals and requirements, (b) taught course sessions in an organized way, and (c) used examples or illustrations to explain difficult points.

This specialized report is important for instructors, for whom assessment of student learning is only part of their job. For them, relating NSSE information to their work can be overwhelming due to the massive amount of data presented in the institutional report. By detailing the ways faculty are succeeding or could better enhance the students' educational experience, the report presents data in a digestible format featuring only the most useful information. Furthermore, this strategy creates specialized tools for the academic affairs staff to use when working with either staff or faculty. The report for instructors and the other UNL specialized reports are excellent demonstrations of assessment experts lowering barriers between data and those who can act on data.

## NSSE, FSSE, and BCSSE Results for Undergraduate Research Projects

### UNIVERSITY OF HOUSTON–VICTORIA

Dr. Sharon M. Bailey, the Director of Institutional Research and Effectiveness at the University of Houston–Victoria, invented an undergraduate research project with the goal of disseminating NSSE results to the greater campus. For this project, two work-study students devised a creative, interactive approach to sharing results. They designed, printed, and folded paper fortune tellers, a form of origami used in children's games, with the institution's BCSSE, NSSE, and FSSE results, making several different versions of the fortune tellers based on different research questions. One showed the average number of hours students work for pay (from NSSE) and faculty perceptions of student time working for pay (from FSSE), providing a conversation-starter about the differences between actual student behavior and

faculty perceptions of student behavior. Another compared students' expectations about how often they would go to class unprepared (BCSSE) with the percentage of freshmen and seniors who reported going to class unprepared (NSSE).

Using the University of Houston–Victoria's NSSE and FSSE reports, the students assigned to this project developed key research skills such as collaborating with peers to coordinate the project and interpret the data and effective reporting skills such as identifying important information, reviewing data for accuracy, and tailoring data to a particular audience.

In the guidebook these student researchers developed to help others create similar paper fortune tellers, they wrote, "Look for pieces of data

from each survey that would go good together. Make sure the data used would appeal to targeted audience." The experiences of these students engaged them in communication, quantitative reasoning, and teamwork. Developing this advertisement for NSSE data required creative energy, and the students were proud of their results.

In the end, these two students designed 14 distinct paper fortune tellers with facts from survey results, and they printed and folded more than 300. The fortune tellers were placed on tables in the student cafeteria and at the faculty and staff appreciation lunch, and the extras were used by the alumni office.

The project was successful in getting campus partners who otherwise might not be familiar with NSSE data to actually see some of the results in their hands. Even a year later, Dr. Bailey ran into faculty and staff who remembered the paper fortune tellers and, in spring 2017, she reprised the project, this time with a message encouraging faculty to participate in FSSE.

## Centering Improvements in Academic Advising for Student Success

### THE OHIO STATE UNIVERSITY

Because advisors can direct students to multiple resources and support services to help them along their education pathways, The Ohio State University (Ohio State) believes improvements in academic advising are essential to ensuring that all students flourish and succeed. To establish a baseline from the student perspective for planning these improvements, Ohio State appended the Academic Advising Topical Module to their 2013 NSSE administration. Additionally, advisors' perceptions about their training and professional development were collected in a survey administered in 2014 by Ohio State.

*Enhancing Academic Advising*, Ohio State's 2014 Higher Learning Commission quality initiative, defined the framework for the improvement effort: "Academic advising requires a collaborative relationship between advisors and students—an active,

sustained, and intentional process, rather than passive, sporadic, and casual contacts." This initiative implemented programs focused on advancing advising to the next level through the following ongoing activities and offerings:

- Training and professional development for advisors
- Assessment of academic advising learning outcomes
- Increased advisor accessibility to and engagement with information to guide and support students
- Enhanced collaboration between advisors and other university offices

To assess the effectiveness of their academic advising quality initiative, Ohio State re-administered the NSSE advising module in 2016. Comparing data from both administrations, the university

found a number of areas in which student responses in 2016 were significantly more positive than in 2013 and no areas in which responses were more negative. Both first-year and senior students responded more positively in 2016 when asked to what extent their advisors helped students understand academic rules and policies and informed students of academic support options (tutoring, study groups, help with writing, etc.). For seniors specifically, Ohio State saw increases in the number of students who said their advisors had been available when needed and listened closely to concerns and questions.

These findings indicate that the ongoing work of Ohio State's quality initiative to enhance academic advising is having a positive impact—which supports the continuation and expansion of this work. Further, Ohio State intends to share these findings to boost advisors' morale, to raise their campus profile, and to promote partnerships with them across campus.



## Enhancing Students' Off- and On-Campus Experiences

### KEUKA COLLEGE

Keuka College, an institution with a unique and unmatched emphasis on real-world experience, uses NSSE data to monitor student satisfaction and engagement in key educational experiences. Every year, every undergraduate student at Keuka College completes a Field Period®—a credit-bearing, off-campus learning opportunity that can resemble an internship or may take the form of community service, spiritual exploration, creative endeavor, cultural exploration, or international travel. These experiences are critical, with 94% of the most recently graduating seniors describing Field Period® as important in assisting with their career development and 20% of Field Period® experiences resulting in full-time employment of graduates. A cornerstone

of the Keuka College curriculum since 1942, Field Period® is represented in 10% of degree requirements for every undergraduate major. For the college's first-year students, the First-Year Experience seminar is crucial because it is their first opportunity to learn about the Field Period® process.

While Keuka College has been intentional in supporting its first-year students through traditional methods like orientation and academic advising, institutional stakeholders noticed that NSSE results indicated first-year students reported low quality interactions with students, advisors, faculty, and staff. This finding led to numerous conversations on campus about how best to foster interaction between first-year students and other campus community members,

and changes to the curriculum and campus culture were implemented. For example, the first-year experience course was revamped to allow for more opportunity for students to interact with faculty on interesting topics such as Exploration of Multicultural Education, Adventure and Recreation, and Leadership.

In another implemented change, advising and course registration were incorporated into New Student Orientation to encourage engagement with faculty. Additional initiatives are being considered to actively engage students past the first semester through additional revisions of the first-year experience. Also, in the fall of 2016, every incoming student was assigned both a major advisor and a student success advisor, forming a team committed to collaborative and proactive advisement to support each student's persistence and success. As a participant in NSSE every other year, Keuka College is excited to see if these implemented changes enhance their Quality of Interaction scores.

## Campus Transitions Open Pathways for Data Use

### NORTH CENTRAL COLLEGE

After several years of modest NSSE data use, North Central College realized a significant increase in interest in student engagement results by a number of campus constituents. Organic conversations about using NSSE data to inform campus practices followed a few transitions in campus leadership and faculty involvement: a new provost, who has encouraged a greater use of partnerships between academic and student affairs; a new director of the Center for the Advancement of Faculty Excellence, who had used engagement research in her own scholarship; a new director of undergraduate research, who has been eager to learn more about the kinds of students engaging in undergraduate research; and faculty who have been increasingly embracing the idea of greater participation in High-

Impact Practices (HIPs). Capitalizing on the potential of these transitions, North Central gave new faculty an orientation session that encouraged them to think about their influence on students' engagement. Facilitated by North Central's vice president for student affairs and dean of students and a group of student leaders, this session sought to empower faculty to think about small adjustments they could make in their own classrooms and in their interactions with students outside the classroom to increase student engagement. North Central also hosted a similar conversation with student affairs staff—having them look at findings within subpopulations including HIP participation by race/ethnicity and gender and in the aggregate to get an idea of how students were experiencing the institution.

Meanwhile, a strategic planning process has been under way at North Central College, and the college has reflected intentionally on the measures important to this process. Instead of relying solely on college and university rankings for progress benchmarks, institutional leaders have asked to know more about what students actually do. In response, at a presentation to the college's board of trustees, the vice president for student affairs and dean of students used NSSE data to illustrate student engagement as an indicator of educational quality and to provide the board a view of the college's performance through its NSSE results and reports. A similar presentation using NSSE data was given to student affairs staff, and the attendees also discussed ways to improve student learning and development with NSSE indicators in mind. North Central continues its efforts to ensure that all campus units know how the construct of student engagement and the data from NSSE can help create successful educational environments for students.

## Concluding Thoughts

*“The NSSE reports provide valuable information, particularly if an institution is in the process of strategic planning or needing to report on progress.”*

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ALICE GRIFFIN,  
DIRECTOR OF  
CURRICULUM REVIEW  
AND PROGRAM  
ASSESSMENT,  
UNIVERSITY OF  
ARKANSAS

A core goal in higher education assessment is the use of evidence for decision making. Encouragingly, as shown in the National Institute of Learning Outcomes Assessment (NILOA) report, *Knowing What Students Know and Can Do: The Current State of Student Learning Outcomes Assessment in U.S. Colleges and Universities* (Kuh, Jankowski, Ikenberry, & Kinzie, 2014), the use of assessment findings to improve quality in undergraduate education has increased. The data use examples featured in this fourth volume of *Lessons from the Field* provide confirmation of this.

More notably, though, these instructive examples demonstrate deeper levels of data use to enhance understanding of educational practice and to motivate action on results. California State University San Marcos used NSSE data to measure the achievement of their institutional learning outcomes for accreditation. Bucknell University used NSSE data to focus attention on diversity initiatives and to study the impact of campus living-learning communities. NSSE data have also informed campus planning efforts, including curricular change and improvements to instructional practice. At the University of San Diego, results from the Information Literacy Topical Module motivated faculty to incorporate teaching information literacy skills into the core curriculum historical inquiry requirement. At Andrews University, NSSE results informed faculty about specific types of feedback to students to improve their performance.

While the institutional examples in this volume show how institutions have successfully employed their NSSE results, they also illustrate the challenges of this work—in how these institutions overcame common hurdles such as communicating results, engaging faculty and stakeholders in results, and moving data into action.

First, to disseminate and share NSSE results, institutions have found they must use multiple approaches including presentations, individual consultations, online postings, and sharing results with campus task forces and relevant departments. Bucknell’s institutional research office developed several data dashboards enabling stakeholders to understand the data

most effectively for their work by allowing faculty and staff to disaggregate findings by student populations and to connect NSSE data to other campus data.

Second, engaging faculty and stakeholders in assessment is an ongoing challenge. For faculty, the assessment of student learning is one of many competing priorities, and the same can be said for the students invited to complete the survey. To get students excited and faculty invested in NSSE, the University of Hawai’i at Mānoa conducted a comprehensive advertising campaign—deploying banners, flyers, prizes, websites, parties, information tables, and student organizations. Then, building on this momentum to get the results to educators who could use them, the institution created resources including video tutorials, interactive tools, and customized reports and presentations. At Oklahoma State University, drawing on their NSSE findings, faculty developers and the assessment office collaborated to encourage faculty to incorporate different teaching strategies.

Third, even for institutions with established means to communicate NSSE results and to work with groups that use the data, moving from discussion to action and from action to improvement can still be a challenge. While some individuals at Andrews University were initially skeptical about their Student-Faculty Interaction findings, they were able to triangulate and confirm the data using an additional campus survey. Digging into the data from both surveys, campus educators derived concrete strategies to improve their interaction with students—and the institution saw a substantial gain in this measure in their Multi-Year Report.

For staff who work in institutional research and assessment, issues related to dissemination, buy-in, and enacting change are ever-present. As successful inroads are made with one group, other campus units remain inexperienced in using evidence to improve. The accounts offered in this volume exemplify the sophistication and depth in institutions’ uses of NSSE data to ensure improvements in student learning on their campuses.

# Resources and References

## NSSE Resources Relevant to Examples Featured in this Report

### Report Builder

The NSSE Report Builder—an interactive tool that instantly generates reports of your choosing—draws from a database of NSSE respondents and can be queried using a combination of student and institutional characteristics. Variable options include the Engagement Indicators and individual survey items. Two versions of the Report Builder are available: Public (accessible to anyone) and Institution (a secure version where participating institutions can create customized reports using their own data).

[nsse.indiana.edu/html/report\\_builder.cfm](https://nsse.indiana.edu/html/report_builder.cfm)

### Accreditation Toolkits

One of the most common institutional uses of NSSE data is for accreditation—in self-studies, in quality improvement initiatives, in discussions during peer evaluator team visits, and in response to an accrediting body's request for improvement or for additional evidence of educational effectiveness. NSSE's Accreditation Toolkits include guidelines to map specific NSSE items to accreditation standards, timelines to help decide when and how often to collect student engagement data, and examples of how other institutions in each region have used NSSE in their accreditation efforts.

[nsse.indiana.edu/html/accred\\_toolkits.cfm](https://nsse.indiana.edu/html/accred_toolkits.cfm)

### NSSE Data User's Guide

Although NSSE reports and resources for creating customized reports are designed to increase data use, determining how best to engage campus audiences and influence campus action can be challenging. The NSSE Data User's Guide outlines strategies, suggests topics for consideration when communicating results, and provides worksheets with exercises to facilitate the use of NSSE data for accountability, assessment, and improvement.

[nsse.indiana.edu/html/data\\_users\\_guide.cfm](https://nsse.indiana.edu/html/data_users_guide.cfm)

### NSSE Item Campuswide Mapping

This resource maps NSSE items to the interests of 26 campus units and departments and suggests approaches to facilitating data sharing and campuswide involvement and action.

[nsse.indiana.edu/pdf/NSSE\\_Item\\_Campuswide\\_Mapping.pdf](https://nsse.indiana.edu/pdf/NSSE_Item_Campuswide_Mapping.pdf)

### NSSE, FSSE, and BCSSE Data Use Examples Search Tool

Over 1,000 examples illustrating how colleges and universities use their NSSE results to improve undergraduate education are available for viewing on the NSSE website.

[nsse.indiana.edu/html/using\\_nsse\\_db/](https://nsse.indiana.edu/html/using_nsse_db/)

### Webinars

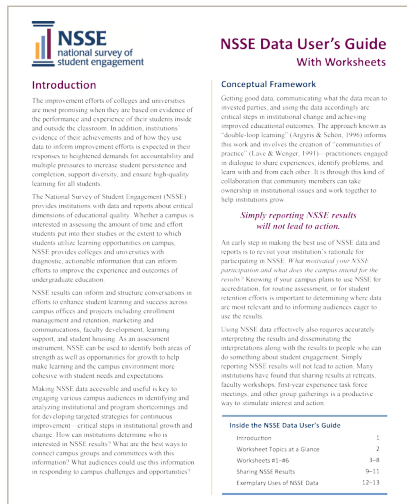
NSSE's webinars are live, interactive presentations on various topics for faculty, administrators, institutional researchers, and other staff who want to better understand and use their NSSE data. Typically, sessions are an hour in length, including a Q&A period. All webinars are recorded and available from our archive for viewing at your convenience.

[nsse.indiana.edu/html/webinars.cfm](https://nsse.indiana.edu/html/webinars.cfm)

### Publications and Presentations Database

NSSE staff members regularly present at conferences (e.g., AIR, AAC&U, FYE, and ACPA) and publish work of interest to NSSE users. Search this extensive database by keyword and/or year.

[nsse.indiana.edu/html/publications\\_presentations.cfm](https://nsse.indiana.edu/html/publications_presentations.cfm)





## Publications Relevant to Effective Uses of NSSE Data

Association of American Colleges and Universities. (2007). *College learning for the new global century* (A report from the National Leadership Council for Liberal Education & America's Promise). Washington, DC: Author.

Association of American Colleges and Universities. (2007). *Essential learning outcomes*. Washington, DC: Author.

Bonner, F. A., II., Marbley, A. F., & Howard-Hamilton, M. F. (Eds.). (2011). *Diverse millennial students in college: Implications for faculty and student affairs*. Sterling, VA: Stylus.

Finley, A., & McNair, T. (2013). *Assessing underserved students' engagement in high-impact practices*. Washington, DC: Association of American Colleges and Universities.

Fosnacht, K., Sarraf, S., Howe, E., & Peck, L. K. (2017). How important are high response rates for college surveys? *The Review of Higher Education*, 40(2), 245–265.

Gonyea, R. M., & Kuh, G. D. (Eds.). (2009). Using NSSE in institutional research [Special issue]. *New Directions for Institutional Research*, 2009(141).

Kinzie, J., Cogswell, C. A., & Wheatle, K. I. E. (2015). Reflections on the state of student engagement data use and strategies for action. *Assessment Update*, 27(2), 1–2, 14–16.

Kinzie, J., McCormick, A. C., & Gonyea, R. M. (2016). Using student engagement results to oversee educational quality. *Trusteeship*, 24(1).

Kuh, G. D., Jankowski, N., Ikenberry, S. O., & Kinzie, J. (2014). *Knowing what students know and can do: The current state of student learning outcomes assessment in U.S. colleges and universities*. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.

McCormick, A. C., Gonyea, R. M., & Kinzie, J. (2013). Refreshing engagement: NSSE at 13. *Change: The Magazine of Higher Learning*, 45(3), 6–15.

McCormick, A. C., Kinzie, J., & Gonyea, R. M. (2013). Student engagement: Bridging research and practice to improve the quality of undergraduate education. In M.B. Paulsen (Ed.), *Higher education: Handbook of theory and research*, Vol. 28 (pp. 47–92). Dordrecht, The Netherlands: Springer.

Swing, R. L., & Ross, L. E. (2016). *Statement of aspirational practice for institutional research*. Tallahassee, FL: Association for Institutional Research. Retrieved from [www.airweb.org/aspirationalstatement](http://www.airweb.org/aspirationalstatement)



### Share Your NSSE Story

NSSE is interested in collecting information on innovative practices surrounding student success and engagement in a variety of areas.

Do you have a NSSE data use story to share?

Your story may include methods for communicating results across institutions or using surveys (and other data) to develop more effective educational practices.

Consider including your NSSE stories about promotion of active learning, integration of student support into the classroom, teaching and learning improvement, or quality improvement initiatives for accreditation.

To share your institution's NSSE story, please visit our website:

[nsse.indiana.edu/html/institutionStory.cfm](http://nsse.indiana.edu/html/institutionStory.cfm)

# National Survey of Student Engagement Staff

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<i>Assistant Director, NSSE Survey Operations &amp; Project Services</i>	Shimon Sarraf	<i>Publications Coordinator</i>	Sarah Martin
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<i>FSSE Project Manager, Research Analyst</i>	Allison BrckaLorenz	<i>NSSE Institute Project Associates</i>	Sarah S. Hurtado John Zilvinskis
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<i>NSSE Research Analysts</i>	Brendan Dugan Kevin Fosnacht Angie L. Miller Amy Ribera Rick Shoup		

“Colleges and universities derive enormous internal value from participating in NSSE. Of equal importance is the reassurance to their external publics that a commitment to undergraduate education and its improvement is a high priority.”

---

MURIEL A. HOWARD, PRESIDENT, AMERICAN ASSOCIATION OF STATE COLLEGES AND UNIVERSITIES



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Blog: [NSSEsightings.indiana.edu](http://NSSEsightings.indiana.edu)





LESSONS FROM THE FIELD—VOLUME 4

# Digging Deeper to Focus and Extend Data Use

FEATURING EXAMPLES OF NSSE DATA USE BY:

Andrews University

Biola University

Bowling Green State University

Bucknell University

California State University, San Bernardino

California State University San Marcos

Carlow University

Indiana University–Purdue University Indianapolis

Keuka College

North Central College

The Ohio State University

Oklahoma State University

Rose-Hulman Institute of Technology

Southern Connecticut State University

St. Olaf College

University of Hawai'i at Mānoa

University of Houston–Victoria

University of Mary Washington

University of Minnesota Duluth

University of Nebraska–Lincoln

University of San Diego

University of Toronto

William Jewell College

# Overview of NSSE

The National Survey of Student Engagement (NSSE) annually surveys first-year and senior students at participating baccalaureate-granting colleges and universities to measure the extent to which they engage in and are exposed to proven educational practices that correspond to desired learning outcomes. Institutions use these reliable, actionable survey results to develop, assess, and improve programs and practices that promote student engagement on their campuses. Administered in the spring term, the survey is short and easy to complete, with questions for undergraduates about:

- Students' exposure to and participation in effective educational practices;
- Their use of time in and outside of class;
- The quality of their interactions with faculty, staff, and other students;
- The supportiveness of their institution's environment; and
- Their perceived gains from the educational experience at their institution.

Institutions participating in NSSE receive a detailed report with customized comparisons to selected peer institutions, supporting materials and resources, and a student-level data file. To date, more than 1,600 colleges and universities in the US and Canada have participated.

The NSSE Institute for Effective Educational Practice was created to provide user resources and to respond to requests for assistance in using student engagement results to improve student learning and institutional effectiveness.

Since the NSSE Institute's inception, in 2003, the work of its staff and associates has helped numerous institutions enhance student success on their campuses and has yielded a major national study of high-performing colleges and universities; dozens of presentations at national and regional meetings; and multiple user resources including workshops, webinars, *Accreditation Toolkits*, and the *NSSE Data User's Guide*.

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## Introduction

NSSE's sharp focus on measuring what matters to student learning and success can richly inform an essential part of an institution's comprehensive decision-support system.

*"NSSE asks things that matter and we've found the results to be sufficiently interesting and relevant to engage student affairs professionals and faculty quite easily in making meaning of the results."*

LAURA COGHLAN,  
DIRECTOR OF  
INSTITUTIONAL  
RESEARCH AND  
ASSESSMENT, THE  
EVERGREEN STATE  
COLLEGE

Since NSSE's debut in 2000, hundreds of institutions have generously shared the actions they have taken using their student engagement results. The 23 new examples of institutions' actions documented in this volume of *Lessons from the Field* illustrate the project's catalyzing influence in the improvement of undergraduate education.

Even more important, however, in addition to demonstrating more intentional use of evidence to improve student outcomes by committed educators, these institutional examples affirm a cultural shift in higher education toward greater acceptance of the centrality of assessment to the practice of a learning organization.

For more than a decade, colleges and universities have experienced greater pressure to demonstrably improve student success rates and increase educational quality and equity. Meanwhile, institutions also face higher expectations for the use of data to inform their decision making. To address these demands, institutions are striving to build precise predictive models for retention and to employ analytics to identify students at risk.

While these efforts represent advancements, they also present the hazard of getting distracted by the technology and losing focus on the role of evidence about the quality of students' learning experiences in motivating campus action to improve student success.

As the *Statement of Aspirational Practice for Institutional Research* (Swing & Ross, 2016) asserts, student success must be at the center of a new vision of the decision-support system in postsecondary education today. NSSE's sharp focus on measuring what matters to student learning and success can richly inform an essential part of an institution's comprehensive decision-support system.

The importance of institutional focus on student success and the power of using data to inform improvements to educational quality are vividly reflected in all of the stories in this volume. These institutions are clearly moving beyond merely collecting data to managing and leveraging their data to realize improvement in the student experience. They are sharing data with more departments and units, creating accessible data visualizations,

## Index of Institutional Examples

### RESPONDING TO ACCREDITATION

California State University San Marcos  
University of Mary Washington  
University of San Diego

### CREATING SPECIALIZED REPORTS

University of Nebraska–Lincoln  
University of Toronto

### INCREASING ACCESS TO DATA

Bucknell University  
Oklahoma State University  
University of Hawai'i at Mānoa

### SHARING RESULTS ACROSS CAMPUS

Bowling Green State University  
California State University, San Bernardino  
Indiana University–Purdue University  
Indianapolis  
North Central College  
St. Olaf College  
University of Houston–Victoria  
University of Minnesota–Duluth

### ENHANCING INSTRUCTIONAL PRACTICE

Andrews University  
Biola University  
Carlow University  
Keuka College  
The Ohio State University  
Rose-Hulman Institute of Technology  
Southern Connecticut State University  
William Jewell College



*“NSSE provides valuable information to institutions that can be utilized in myriad ways and to support other data efforts that may be taking place on campus.”*

BETHANY MILLER,  
DIRECTOR OF  
INSTITUTIONAL  
RESEARCH AND  
ASSESSMENT,  
CORNELL COLLEGE

and using results to motivate meaningful change to instructional practice and institutional policy on their campuses.

The institutional accounts that follow also illustrate the increasing depth of NSSE use and the unique ways data can reveal insights about the student experience to influence institutional change. This work demonstrates exciting, tangible improvements to educational effectiveness and student success.

But we are far from done.

The new vision of institutional research extols expanding data access to all who can be actively involved in turning it into decision-support information, focusing on student success, and assuring that instructional practice produces desired student outcomes. NSSE results compellingly facilitate these objectives and the broader agenda for continuous improvement in undergraduate education.

Making effective use of student engagement data to improve student success has been and continues to be the most consequential outcome of the NSSE project. We are indebted to all the campuses that have shared their stories of data use and hope they inspire action at more colleges and universities.

Andrews University



## ENGAGEMENT INDICATORS & HIGH-IMPACT PRACTICES

To represent the multiple dimensions of student engagement, NSSE provides results on 10 Engagement Indicators calculated from 47 core NSSE items and grouped within four themes. The Engagement Indicators provide valuable information about distinct aspects of student engagement by summarizing students' responses to sets of related survey questions.

### ENGAGEMENT INDICATORS (EIs)

#### THEME: Academic Challenge

Higher-Order Learning  
Reflective & Integrative Learning  
Learning Strategies  
Quantitative Reasoning

#### THEME: Learning with Peers

Collaborative Learning  
Discussions with Diverse Others

#### THEME: Experiences with Faculty

Student-Faculty Interactions  
Effective Teaching Practices

#### THEME: Campus Environment

Quality of Interactions  
Supportive Environment

Additionally, in a separate report, NSSE provides results on six High-Impact Practices, aptly named for their positive associations with student learning and retention through enriching educational experiences that can be life changing. High-Impact Practices typically demand considerable time and effort, facilitate learning outside of the classroom, require meaningful interactions with faculty and other students, encourage collaboration with diverse others, and provide frequent and substantive feedback.

### HIGH-IMPACT PRACTICES (HIPs)

Learning Community  
Service-Learning  
Research with Faculty  
Internship/Co-op/Field Experience  
Study Abroad  
Culminating Senior Experience

# Featured Institutional Uses

## Multi-Year Findings Spark Efforts to Improve Feedback to Students

### ANDREWS UNIVERSITY

**NSSE findings informed faculty of the multiple ways they could provide feedback to students and deepened their understanding of students' needs and expectations regarding feedback.**

According to Andrews University's results from NSSE 2013, their students received feedback from faculty less frequently than students at comparison institutions—specifically, in the extent to which their instructors provided (a) feedback on a draft or work in progress and (b) prompt and detailed feedback on tests or completed assignments. Examining responses to these two survey items, the Office of Institutional Effectiveness noticed that the university's average score was lower than those of the comparison group, the peer institutions, and NSSE overall that year. When these findings were presented to faculty, however, they were met with skepticism—and with comments such as “I give grades back in a week”—motivating the presenters to further investigate this aspect of education and to attempt to expand the understanding on their campus of what constitutes effective feedback.

To mitigate possible faculty apprehension about NSSE data, the office conducted a

separate follow-up student survey focusing on feedback from faculty. Students were asked about the value of different types of feedback such as opportunities outside of class to ask the instructor questions, rating scales with detailed descriptions of performance, rubrics for grading, and written comments. Students were also asked about the timeframe within which feedback should be given for different types of assignments (e.g., drafts of papers or projects; quizzes and short assignments; long assignments, papers, or projects; and major exams).

The results from this survey indicated that over 80% of students found most forms of feedback either “valuable” or “very valuable” and that they expected feedback in the next class period for quizzes and short assignments and within a week for larger assignments. These findings showed that Andrews University students found multiple types of feedback (beyond grades alone) valuable to their education and that the students had reasonable expectations regarding the timeframe for feedback. Presented at the general faculty meeting in April 2014, the findings informed faculty of the multiple ways they could provide feedback to students and deepened their understanding of students' needs and expectations regarding feedback.

To evaluate the effects of this intervention, the same office compared the university's NSSE 2013 and NSSE 2015 scores. Using their Multi-Year Report from NSSE, researchers were able to track the change in the Student-Faculty Interaction Engagement Indicator—a factor comprising four NSSE items, two of which (mentioned above) began this campus conversation. By using that report, the Assistant Provost of the Office of Institutional Effectiveness was able to see improvements in student engagement related to interaction with faculty by both first-year and senior students. In this effort, Andrews University used NSSE data to identify an area of concern; to explore it further on their campus; to provide faculty with actionable evidence on how to improve their teaching; and, by comparing old and new results in their Multi-Year Report, to measure the intervention's effects.

### TIPS FOR MULTI-YEAR ANALYSIS

With access to multi-year data, institutions can measure change due to campus initiatives, identify trends, and confirm stability and reliability. Now that the updated NSSE has been in the field for five years, we offer support to institutions in their multi-year analyses.

Here are some tips for effectively using the data:

- Compare cohorts from one year to another (e.g., 2013's first-years vs. 2016's first-years).
- Make longitudinal comparisons (e.g., 2013's first-years vs. 2016's seniors).

Remember that:

- Engagement is a process measure, not an achievement measure;
- The first and senior years are different contexts with different engagement patterns;
- First-years include students who will leave your institution; and
- Seniors include persisters as well as transfers.

# Sharing and Using NSSE Data to Drive Sustainable Improvement

## BUCKNELL UNIVERSITY

The purpose of making data more accessible is to encourage departments and units across campus to use this information more effectively to improve practice.

In 2014, during a board of trustees meeting, Bucknell University President John C. Bravman outlined five attributes critical to the institution's long-term sustainability: being forward looking, data driven, highly intentional, prudently bold, and student centered. Applying that vision to become highly intentional about sharing and making data as accessible as possible to administration, faculty, staff, students, and external constituents, Bucknell has developed a number of dashboards focused on specific topics.

One of these dashboards, dedicated solely to NSSE data, provides means for each of the NSSE Engagement Indicators (EI) and frequencies for the items they comprise and, further, allows users to disaggregate data by race, gender, residential college, Greek life affiliation, Pell recipient status, and first-generation status. On a number of other dashboards, NSSE data supplement the institution's internal data as well as data from other instruments. Bucknell's Diversity Dashboard, for example, includes items from NSSE's Discussions with Diverse Others Engagement Indicator, among others, and allows for comparisons by various student demographic characteristics.

The university's Student Learning Outcomes web page pairs NSSE results with data from the Hart Research Associates survey of employer priorities for college learning and success (see Figure 1; [www.aacu.org/leap/public-opinion-](http://www.aacu.org/leap/public-opinion-research/2015-survey-results)

[research/2015-survey-results](http://www.aacu.org/leap/public-opinion-research/2015-survey-results)) and with the Higher Education Data Sharing Consortium's HEDS Alumni Survey (see Figure 2; [www.hedsconsortium.org/alumni-survey](http://www.hedsconsortium.org/alumni-survey)). Results are also displayed of students' participation in High-Impact Practices (see Figure 3).

Two additional dashboards in development at Bucknell will combine data from multiple surveys. One, the Campus Climate Dashboard, will be an invaluable resource for numerous campus offices by providing a summary of findings related to campus climate issues from NSSE, the College Senior Survey (CSS), the Consortium on High Achievement and Success (CHAS) survey, and the National College Health Assessment (NCHA) survey. The other, the General Education Dashboard, will provide a mix of direct and indirect measures (from NSSE and alumni surveys) that will support the assessment efforts of faculty and administrators.

The purpose of making data more accessible is to encourage departments and units across campus to use this information more effectively to improve practice. Demonstrating this, Bucknell has used NSSE data to review the impact on student success of participating in the Residential Colleges—living-learning communities that have been a part of campus life at Bucknell for 30 years.

For this analysis, Bucknell researchers linked NSSE data with institutional retention and first-year GPA data, which served as a proxy for first-year student success. Also, Beginning College Survey of Student Engagement (BCSSE) data were used to compare the pre-college and first-year experiences of Residential College participants and nonparticipants, controlling for student background characteristics.

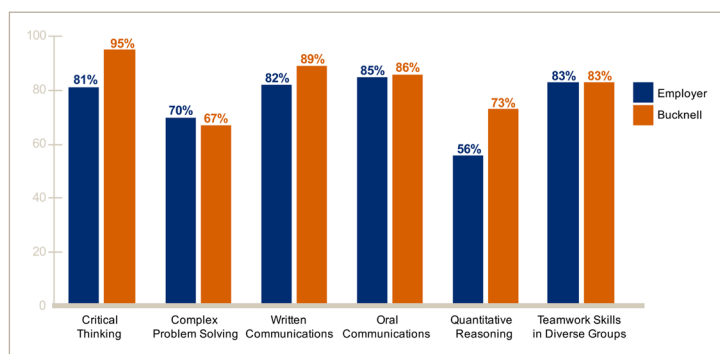


Figure 1. Bucknell Students' Engagement Compared to Employer Priorities

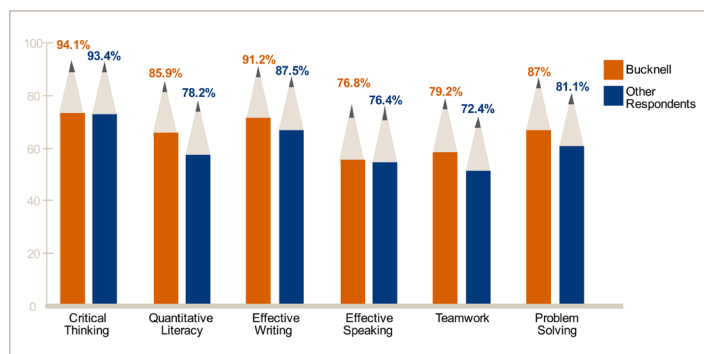


Figure 2. Students' Reports of Positive Impact on Their Learning from Their Undergraduate Experience



### EXAMPLES OF COMPELLING DATA VISUALIZATION

This volume provides several examples of institutions that graphically represent their data in ways that compel action among campus stakeholders. More examples can be found on our website:

[nsse.indiana.edu/html/inst\\_web\\_site\\_display.cfm](https://nsse.indiana.edu/html/inst_web_site_display.cfm)

Some institutions make their data publicly available through visualizations that illustrate the engagement of their students. Brock University, for example, uses Tableau software to employ dynamic reporting that allows viewers to manipulate the data:

<https://brocku.ca/institutional-analysis/external-surveys/nsse>

NSSE Institute is interested in the many innovative ways users present their data and continues to feature new examples at conferences and on the institute website:

[nsse.indiana.edu/institute](https://nsse.indiana.edu/institute)

**Bucknell has used NSSE data to review the impact on student success of participating in the Residential Colleges and to enhance diversity initiatives on campus.**

The researchers found Residential College participation significantly linked to positive results for the Reflective and Integrative Learning and the Discussions with Diverse Others Engagement Indicators, participation in High-Impact Practices, and retention. Based on these findings, Bucknell has prioritized Residential College participation, achieving a nearly 40% increase in that participation over the last three years.

Bucknell has also used NSSE findings to enhance diversity initiatives on campus. Specifically, researchers looked at responses by racial and ethnic group to individual items in the Discussions with Diverse Others Engagement Indicator and in High-Impact Practices participation. Informed by these findings, changes were then made to the training for

both Orientation Assistants (OAs) and Resident Advisors (RAs) to include new topics and offices focused on diversity and inclusion. The revised OA training includes a session on critically examining first-year students' experiences through a diversity lens, specifically paying attention to the needs of students with disabilities and students with different religious and political views as well as those who have experienced exclusion or discrimination on campus. The revised RA training emphasizes diversity and cultural fluency as core themes and has sessions dealing with power and privilege, campus climate, identity development, and global and world events. Additionally, the revised RA selection and interview process incorporates considerations related to cultural competency and diversity.

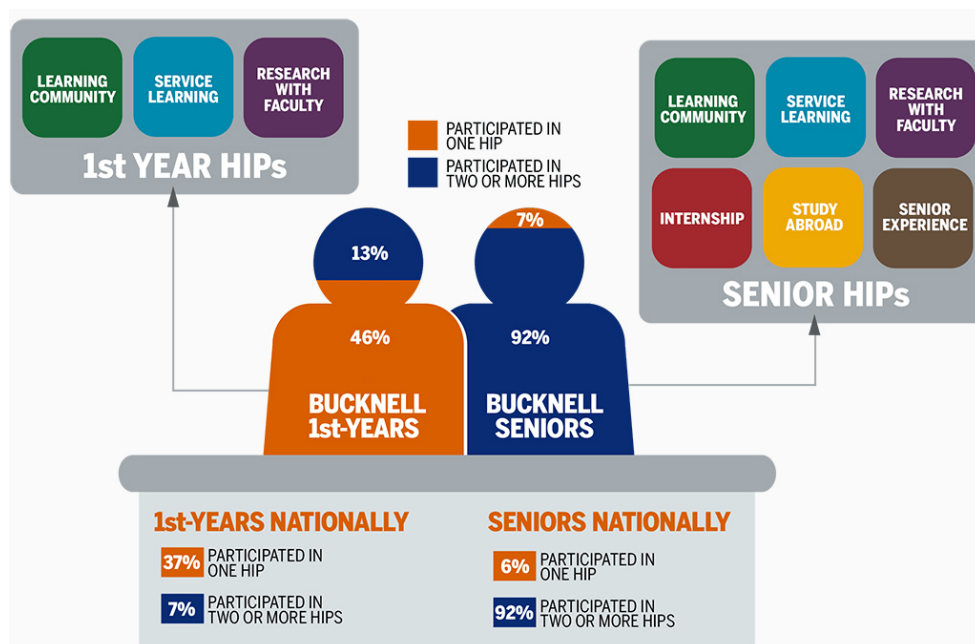


Figure 3. Bucknell Students' Participation in High-Impact Practices Compared to National Participation

# Weaving Data into Decision Making

## ST. OLAF COLLEGE

With extensive high-quality data on hand along with the knowledge of how to weave these data into decision making, St. Olaf's institutional research office is prepared to answer the question: "How well are we doing?"

At St. Olaf College, NSSE data are woven into the decision making of the Board of Regents, the President's Leadership Team, the Academic Leadership Team, the Curriculum Committee, and the Provost. For example, NSSE items and Engagement Indicators are incorporated into the Board of Regents Community Life Committee metrics for campus diversity, student well-being, and student engagement. These data are triangulated with other sources of information such as the St. Olaf Student Information System, the National College Health Assessment, and the St. Olaf Learning Goals Questionnaire. Beyond establishing reliable metrics, mapping different sources of data to desired goals allows the committee to more strongly align these goals with the St. Olaf College president's vision and to identify important areas where data are not currently being collected.

Additionally, NSSE data have recently been used by St. Olaf staff (a) to inform a particular line of decision making within the institution and (b) to analyze data collected previously to answer constituents' questions. NSSE results are also used to communicate institutional achievements to the public. For example, on St. Olaf's institutional learning outcomes website, StOGols, NSSE data are used to show evidence for Insightful Integration and Application of Learning and Intentional and Holistic Self-Development.

After a St. Olaf College NSSE administration a number of years ago, the college's Institutional Research and Effectiveness office conducted student focus groups to examine the institution's survey responses. Among the concerning issues that emerged from these focus groups was students' uncertainty about formal and informal advising and the different types of encounters with each. A task force was convened to evaluate the academic advising received by St. Olaf's students.

Expanding the institution's data collection on this issue, in its next NSSE administration, St. Olaf used the Academic Advising Topical

Module, enabling the comparison of St. Olaf's academic advising efforts with those of participating peer institutions. The resulting information gathered through the focus groups and NSSE, as well as other surveys conducted on campus and with alumni, guided the restructuring of St. Olaf's new academic advising office and also informed the hiring process for a new director of that office. In summary, to address an emergent issue in its academic advising, St. Olaf took a specific course of action—reworking academic advising—and gathered high-quality information to carry out that action successfully.

The Institutional Research and Effectiveness office has also used NSSE data to answer questions posed by the Board of Regents about the quality of the St. Olaf student experience. In one instance, board members were curious about how St. Olaf students would score in areas measured on the Gallup-Purdue Index, a national study linking college student success to high-impact experiences such as internships and extracurricular activities. Although St. Olaf had not participated in this study, the Institutional Research and Effectiveness office was able to answer the board's question by leveraging data already collected through the NSSE survey and the Higher Education Data Sharing (HEDS) Consortium alumni survey—for example, to provide the percentage of St. Olaf seniors who participated in an internship, co-op, field experience, student teaching, or clinical placement, and, further, to contextualize this percentage by providing comparison group data.

It is not uncommon for members of St. Olaf's Board of Regents to read about trends in higher education and to wonder, "How well are we doing?" With extensive high-quality data on hand—along with the knowledge of how to weave these data into decision making—St. Olaf's institutional research office is prepared to answer.

# Enhancing the First-Year Seminar with Data on Writing

## UNIVERSITY OF MARY WASHINGTON

UMW has a culture of positive restlessness—continually looking for ways to improve student experience and monitor interventions.

University of Mary Washington's (UMW) 2013 Quality Enhancement Plan (QEP)—“UMW's First-Year Seminar: Research, Write, Speak”—was developed to enhance the first-year seminar experience. UMW had established the First-Year Seminar (FSEM) requirement, in 2008, based on NSSE results indicating lower levels of engagement among first-year students. Designed as a three-credit course and featuring a student/faculty ratio of 15:1, FSEM focused on building a skill set for success in a rigorous academic environment to be learned in a content-driven context of mutual interest to the students and faculty. Topics of these FSEM courses have included Game Theory, Making a Difference, and Race and Revolution.

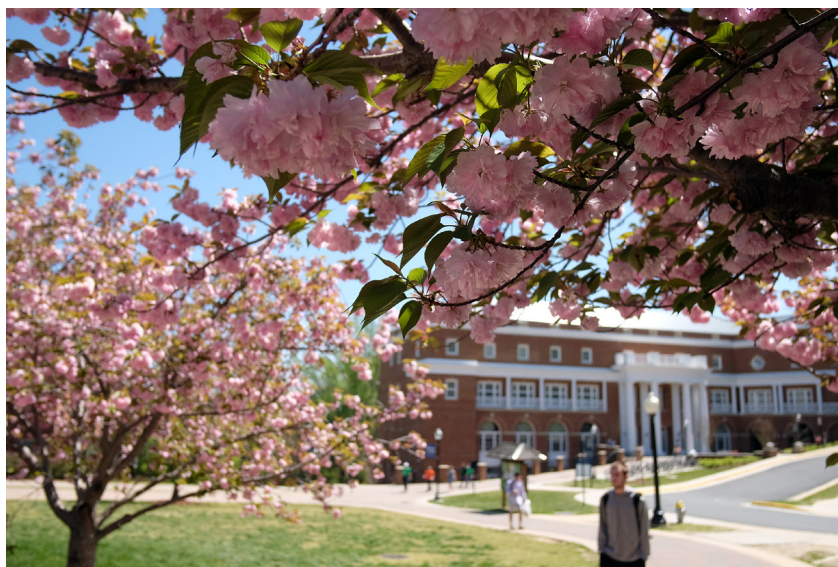
Since the creation of the required course, student learning at UMW has been monitored via institutional surveys and data, along with NSSE findings. Continued evidence indicated that FSEM could be improved, and this became the focus of the Quality Enhancement Plan advanced as part of UMW's 2013 reaffirmation of accreditation by the Southern Association of Colleges and Schools Commission on Colleges. For example, results from NSSE 2010 and 2012 indicated that, in most cases, UMW first-

year students perceived that their institution contributed less in the areas of writing and integration of ideas compared with first-year students at peer institutions. Other institutional data, such as surveys of admitted students and graduating seniors, corroborated these findings.

In response to the concerns about student writing, the faculty-authored QEP established uniform and measurable learning outcomes for all FSEM courses including, “Improve development and organization of written arguments” and “Demonstrate the ability to edit and revise in the writing process.” Also, under the direction of the QEP office, staff in UMW's academic learning centers (writing, speaking, and library) developed online learning modules to support student development in the areas of information literacy, writing proficiency, and oral communication. Instruments to measure student learning across FSEM courses included embedded assessments of core learning modules (information literacy, writing, and speaking) and standardized rubrics. Lastly, UMW identified resources to support faculty development in adopting course learning outcomes, incorporating online learning modules, and implementing assessment tools such as rubrics to evaluate student work. To further support this ambitious initiative, the institution made FSEM a premier experience for first-year students by moving all seminars to the fall semester, having the first-year seminar instructor serve as the student's first-year academic advisor, and attaching a learning community based on the student's FSEM course assignment. As a result, almost all first-year students live in a residence hall community built around the FSEM course. Results following these changes show increases in student GPA and retention.

University of Mary Washington has a culture of positive restlessness—continually looking for ways to improve the student experience and monitor interventions. As a demonstration of this culture, UMW participated in the NSSE Academic Advising Topical Module in 2014 and 2016, and results indicate strong improvements in advising experiences since involving faculty as advisors for first-year students. Future UMW improvement efforts will include examining changes in behaviors related to the Academic Challenge Engagement Indicator and increasing opportunities for faculty to speak with students regarding career plans.

University of Mary Washington





# Engaging Student Affairs in Student Engagement Improvements

## CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO

Simply getting more students to live on campus is not enough; their experience must intentionally offer the resources and support to assist them toward graduation.

The California State University (CSU) system has a clear goal: to increase graduation rates for all students across all 23 campuses to meet California workforce demands. *Graduation Initiative 2025* outlines CSU's key objectives for first-time first-year and transfer students. At California State University, San Bernardino (CSUSB), working toward these goals has meant ensuring all institutional divisions are involved in the process, including each student affairs unit. Cautious of too hastily developing and implementing new programs and initiatives, CSUSB's approach has been to thoughtfully consider ways to increase intentionality and efficiency in work already being done on campus, identifying areas already improving as well as areas needing further improvement. Figures 4 and 5 show how these data have been made accessible to campus constituents.

The Department of Housing and Residential Education (DHRE) has used NSSE to assess the impact that living on campus has on student

engagement, comparing effects not only of on- and off-campus living but also of specific housing programs (e.g., faculty-in-residence, sustainability programs). DHRE's assessments of various initiatives have looked at the relationship of students' living environment with NSSE Engagement Indicators and High-Impact Practices participation to determine which DHRE practices have the most impact on student learning and success. These findings are especially important as the institution moves toward increasing the number of students living on campus. Simply getting more students to live on campus is not enough; their experience must intentionally offer the resources and support to assist them toward graduation.

Other CSUSB offices find NSSE gives insight into populations of students who face unique challenges that other surveys may not capture. Services to Students with Disabilities (SSD), for example, searches NSSE data for trends among students with disabilities. These data combined with resources from the Council for Learning Disabilities inform the development and implementation of SSD's strategies.

The Veterans Success Center (VSC), using NSSE data to inform programmatic decisions about how best to support student veterans, created a Veterans Learning Community where military-affiliated students receive support in transitioning to the university (e.g., selecting courses, choosing a major, understanding campus requirements), participate in a seminar series to enhance academic skills (e.g., study practices) and personal skills (e.g., social networking), engage in community service and family-based activities, explore career options, and prepare for life after CSUSB. To develop coping skills for life challenges on the path to graduation, student veterans also receive on-site academic support, personal development and academic skills building workshops, a mental health support group, community enrichment projects, and family engagement activities. NSSE data were also instrumental in the development of a dedicated tutoring program and study space for military-affiliated students. VSC has partnered with the Communications Studies Department in a collaborative effort featuring military leaders; VA representatives; and CSUSB staff, faculty and student veterans to expand faculty training for successfully instructing and interacting with military-affiliated students.

### TIPS FOR ANALYZING SMALL POPULATIONS

A common challenge institutions face is analyzing data for small subpopulations on their campuses, for example, adult learners, bi-racial and multi-racial students, gender-variant students, and women of color in STEM. These groups are often marginalized on campus and their experiences can be lost in aggregate results. To support institutional efforts to analyze small populations we offer these considerations:

- Remember that descriptive studies and percentage differences are legitimate forms of analysis.
- Telling the story of a small population alone can be enough; comparison to the general population is not always needed.
- Be wary of diluting your results by clumping together small population groups to increase your counts.
- Before presenting findings on small populations, reset your audience's expectations.
- Think ahead to apply strategic recruitment efforts to survey your small populations.

To improve the transition experience both for students coming from high schools and for those transferring from community colleges, CSUSB's orientation programs have become transition programs—and NSSE data have been embedded in this change.

To support students of color from communities who have historically graduated at lower rates, CSUSB has recently opened three student success centers: the Pan-African Student Success Center, the LatinX Student Success Center, and the First People's Student Success Center. NSSE data along with Lumina, AAC&U, and institutional and systemwide data informed the need for these centers—as illustrated, for example, in CSU system's very low graduation rates for First Nations students. Increasing resources and support for all students will be central to CSUSB's work toward meeting the *Graduation Initiative 2025* goals.

Lastly, to improve the transition experience for both students coming from high schools and those transferring from community colleges, CSUSB's orientation programs have become *transition* programs—and NSSE data have been embedded in this change. The new student convocation, for example, incorporates NSSE data on students' engagement on campus and supplements this with student leaders sharing stories about their own engagement and encouraging new students to take advantage of campus support and resources. Given the many ways CSUSB is working to improve the student experience and increase engagement, its next NSSE administration will be important for assessing the impact of these strategies.

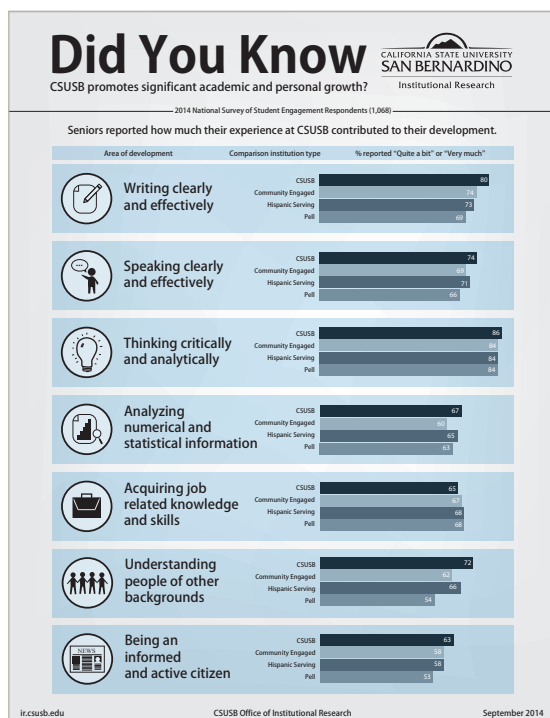


Figure 4. CSUSB Peer Group Comparisons on Perceived Gains Items

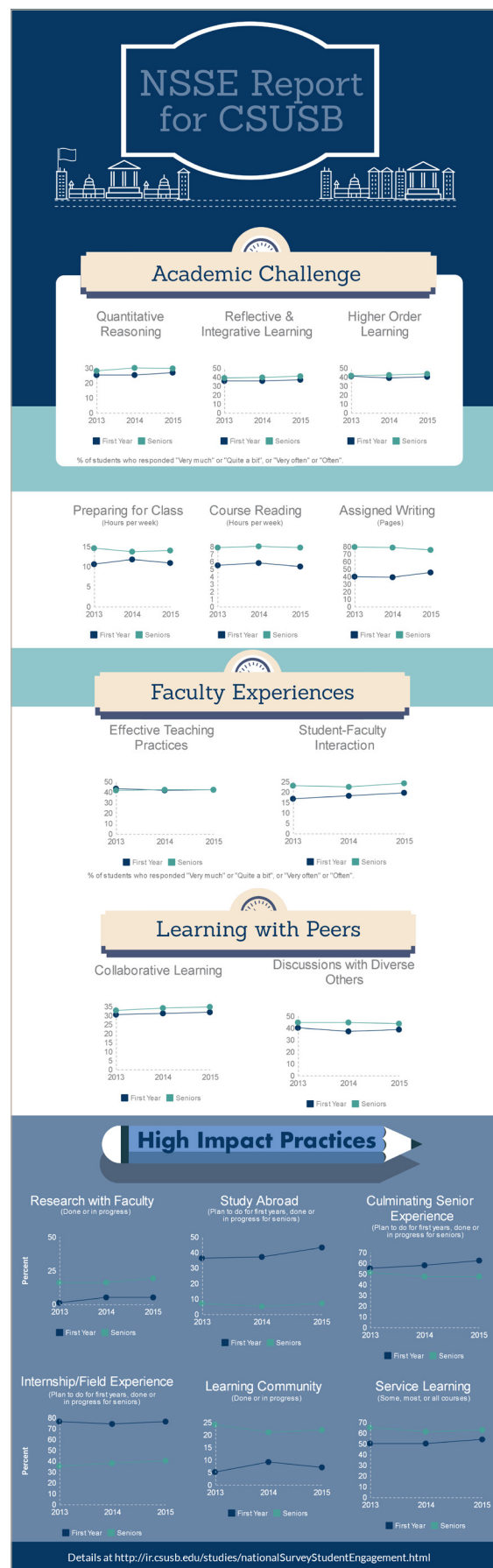


Figure 5. Infographic Summary of NSSE 2015 Results

# Strengthening Information Literacy Awareness and Skills

## UNIVERSITY OF SAN DIEGO

The evidence gleaned from the Experiences with Information Literacy Topical Module will strengthen USD's goal to equip students with knowledge and skills foundational to 21st-century higher education.

Information literacy has become a growing priority and a new core competency for the University of San Diego (USD), where it is recognized as a student learning outcome spanning all disciplines and critical to the success of all USD graduates. Information literacy is also emphasized in the Western Association of Schools and Colleges Senior College and University Commission (WSCUC) accreditation standards as a core competency that prepares students for future careers and life-long learning.

Therefore, in 2011, USD began core revision work for assessing students' progress in this area. The first step consisted of assessing the baseline level of students' information literacy skills. Subsequent pilot interventions sought faculty volunteers who worked closely with a librarian in an effort to demonstrate how various disciplines could incorporate information literacy into their courses. To raise faculty awareness of the need for information literacy training, these faculty-librarian teams assessed the strategies employed during the pilot stage.

In 2015, USD appended the Experiences with Information Literacy Topical Module to their NSSE administration. The module's findings served two main purposes. First, they represented a baseline for how students

perceived information literacy and responded to the institution's prioritizing of information literacy. Second, the findings could be used to encourage faculty and staff across the institution to recognize the importance of focusing on this area. For example, one module finding was that many first-year students did not perceive that key information literacy outcomes or skills were embedded in their courses. USD considered this problematic, as students should be developing these skills in all of their courses.

As follow-up interventions, USD librarians developed a set of curricular offerings to help faculty and their students acquire information literacy skills; USD core curriculum faculty incorporated the teaching of information literacy skills into the historical inquiry requirement; and, specifically to address the development of these skills in the first year, USD hired a writing director to work closely with librarians to ensure information literacy becomes a core piece of the first-year experience.

USD is also working with faculty to explicitly deepen students' awareness of the importance of gaining information literacy skills. For example, a faculty member in engineering identifies and describes information literacy skills to students as a part of the course and carves out time to articulate to students what to focus on to gain these skills by completing course assignments (e.g., research paper). When these connections are made explicit, students appear to be more engaged in the learning process. It is important to USD that faculty members as well as staff across the institution are involved—making increasing students' skills truly an institutional effort.

USD plans to implement the Experiences with Information Literacy Topical Module again to monitor progress in student awareness since designating information literacy an institutional core value. These results will also be incorporated into future accreditation reports in the discussion of WSCUC's five core competencies. The evidence gleaned from this NSSE module will strengthen USD's goal to equip students with the knowledge and skills foundational to 21st-century higher education.

### UPDATE ON NSSE TOPICAL MODULES

Since the introduction of NSSE's Topical Modules in 2013, more than 1,000 institutions have appended at least one module to their NSSE administration, using the results to generate and inform conversations among faculty, staff, and administrators with deeper, focused insight into key aspects of the student experience including academic advising, writing, transferable skills, and civic engagement. Since the publication of the previous volume of *Lessons from the Field*, NSSE has added these Topical Modules: First-Year Experiences and Senior Transitions, Global Learning, and Inclusiveness and Engagement with Cultural Diversity. NSSE will continue to develop additional modules on important topics related to student learning and development.

[nsse.indiana.edu/html/modules.cfm](http://nsse.indiana.edu/html/modules.cfm)



# BCSSE and NSSE Uses Embedded in the College Culture

## WILLIAM JEWELL COLLEGE

The college administered the Learning with Technology module and found changing levels of technology use in high school reported by first-year students over the last few years.

William Jewell College is an intimate college, in Liberty, MO, and a longtime participant in NSSE and BCSSE. Because of this long-standing commitment to the surveys, components of these instruments have been embedded in discussions about the curriculum, improving instructional practice, and in advising discussions. For example, stagnant senior scores on NSSE's Academic Challenge Engagement Indicator led to an initiative to disaggregate these data by major and to have conversations with academic departments to raise their awareness of the survey results. These conversations stimulated course-level adjustments within departments that resulted, in subsequent surveys, in seniors in most programs reporting higher scores on the Academic Challenge indicator.

The institution also uses BCSSE scores to facilitate relationship-building between the academic advisor and first-year advisee by asking them to discuss the differences in the first-year student's expectation of the college

experience and their high school experience and behaviors, corresponding with items on the BCSSE instrument. At William Jewell College, as at many similar institutions, faculty serve as advisors for students. BCSSE information provides guidance for faculty on how to best support students. Advisors are asked to pay particular attention to students who plan to spend less than 15 hours a week studying, more than 10 hours a week working, or more than 10 hours a week participating in co-curricular activities. They are also asked to pay attention to low self-ratings within the sections of Expected Transition Difficulty or Academic Perseverance.

William Jewell College also exemplifies how to use NSSE Topical Module data to guide curriculum development and resource allocation. Stakeholders at the institution leveraged data from the Experiences with Diverse Perspectives module to enhance a ten-year plan to increase campus structural diversity and interactions around diverse topics and to be more inclusive. Results from years of collecting data from this module indicated that students at the institution were less likely than the institution desired to engage in activities or to participate in conversations regarding societal differences. Although comparison showed that the institution's data were similar to the data of peer institutions, the college aimed for even better performance. As a result, the faculty approved adding a required common course on identity and society for all new students (starting Fall 2017) and requiring those students by the time of graduation to complete two approved diversity and inclusion courses (at least six credits), one on diversity in the US and the other on global diversity.

The college also administered the Learning with Technology module and found changing levels of technology use in high school reported by first-year students over the last few years. This information informs on-going changes in how the institution integrates digital resources, leverages a digital commons, and maximizes its one-on-one mobile initiative that provides all students an iPad. Educationally effective technology use has become so ubiquitous at the institution that Apple has designated William Jewell College a Distinguished School for its "innovation, leadership, and educational excellence."

William Jewell College



## Longstanding Commitment to Use NSSE Data in Many Ways

### INDIANA UNIVERSITY – PURDUE UNIVERSITY INDIANAPOLIS

**IUPUI has been administering NSSE since 2002 and NSSE data continue to be vital in shaping its conversations regarding student engagement and learning.**

Indiana University–Purdue University Indianapolis (IUPUI) has been administering NSSE since 2002. In its NSSE 2006 results, IUPUI's first-year students indicated they were less likely than students at peer institutions to report either serious conversations with students different from themselves or to include diverse perspectives in class discussions or writing assignments. These results informed curricular discussions on campus and led to the development of more Themed Learning Communities to create opportunities for students to discuss issues of diversity, inclusion, and equity.

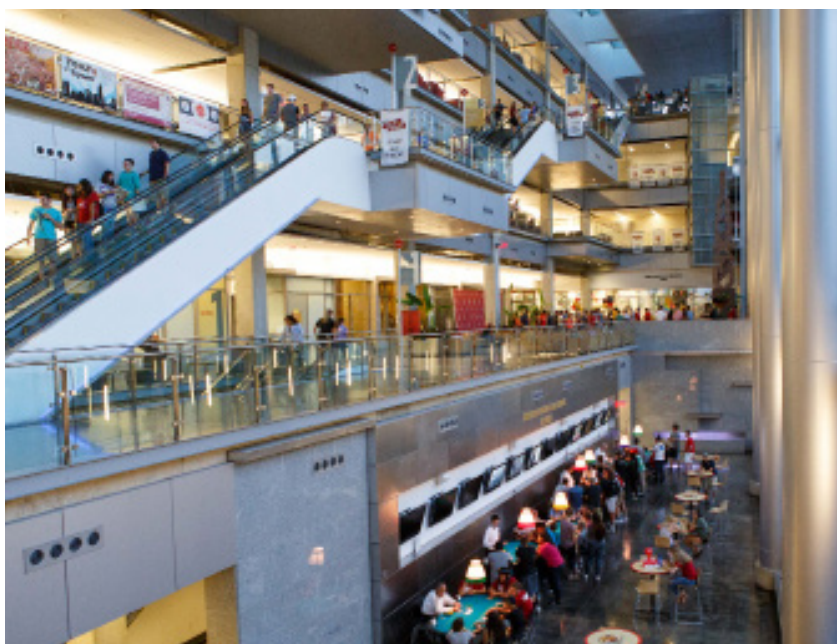
At IUPUI, a Themed Learning Community (TLC) is comprised of a first-year seminar and two or more disciplinary courses in which a group of 25 freshmen co-enroll. Throughout a semester, the TLC group explores a theme, makes integrative connections between courses, and engages in out-of-class experiences guided by the TLC's faculty team. In 2016, IUPUI had 11 different TLCs focusing on diversity. Also in 2016, TLCs

formed a partnership with IUPUI's Diversity, Enrichment, and Achievement Program from which four new TLCs were created, in 2017, to support the success of students from populations traditionally underrepresented in higher education. To monitor the effectiveness of TLCs in helping students achieve institutional learning goals, IUPUI researchers have used NSSE data. In one report, NSSE items mapped to the institution's Principles of Undergraduate Learning (PULs) learning outcomes showed that TLC participants had higher scores than nonparticipants along these outcomes (see Figure 6).

In addition to advancing diversity, inclusion, and equity at the institution, IUPUI stakeholders are interested in increasing participation in and measuring the quality of High-Impact Practices (HIPs). One key campus initiative targeting this goal is RISE—Research, International experiences, Service-learning, and Experiential learning—which provides maps for students to enroll in RISE courses and resources for faculty (e.g., taxonomies and funding for course development). To measure the quality of RISE, the Office of Institutional Research and Decision Support uses retention data, follow-up surveys, qualitative interviews, and NSSE data. Triangulated with data from the other sources, NSSE data are used to illuminate the relationship between HIP participation and desired student outcomes. NSSE results have indicated that, among first-year and senior students, RISE participation is related to increases in engagement behaviors associated with Higher-Order Learning and Discussions with Diverse Others.

NSSE data continue to be vital in shaping conversations at IUPUI regarding student engagement and learning. Dynamic reporting from the Office of Institutional Research and Decision Support via Tableau data visualization software allows users to examine student HIP participation by (a) the total number of HIPs completed or (b) participation in a specific HIP (e.g., service-learning, undergraduate research, internships). Users can disaggregate the data by student characteristic (e.g., gender, race/ethnicity, full-time or part-time status) and by school within the university; they can also compare participation rates between IUPUI and peer institutions and other public research universities (see Figure 7).

Indiana University–Purdue University Indianapolis



IUPUI has historically used data to inform the creation of educational interventions, and the institution's ongoing innovation keeps data alive in present-day conversations about the institution's future.

This tool presents a data-rich way to inform educators skeptical of their department's contribution to low institutional participation numbers, those interested in how they “stack up” with peers, and those who want to ensure equitable HIP participation across different student groups.

Conversations about future initiatives at IUPUI have also drawn on NSSE data. For example, NSSE 2015 results informed discussions at the winter retreat of the nationally recognized IUPUI Center for Service and Learning (CSL). Specifically, discussing IUPUI's low scores (relative to those of peer institutions) on the

### The Principles of Undergraduate Learning, National Survey of Student Engagement and IUPUI Themed Learning Communities

National Survey of Student Engagement Mapped to IUPUI Principles of Undergraduate Learning (PULS): Themed Learning Community Students Have Significantly Higher Mean Ratings Compared to IUPUI Non-Participants and Selected Urban Peers  
(TLC N=80, IUPUI Comparison Group N=270).

PULS AND CORRESPONDING NSSE ITEM	TLC	IUPUI COMPARISON GROUP (NOT-TLC)	PEER INSTITUTIONS
<b>Integration &amp; Application of Knowledge</b>			
Worked on a paper or project that required integrating ideas or information from various sources.	3.45	3.08	3.04
Put together ideas or concepts from different courses when completing assignments or during class discussions.	2.84	2.60	2.55
<b>Understanding Society &amp; Culture</b>			
Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments.	3.10	2.69	2.85
Participated in a community-based project (e.g., service learning) as part of a regular course.	2.16	1.75	1.38
Institutional emphasis: Encouraging contact among students from different economic, social, and racial or ethnic backgrounds.	3.05	2.56	2.59
Institutional contribution: Understanding people of other racial and ethnic backgrounds.	2.89	2.56	2.78
<b>Intellectual Depth, Breadth &amp; Adaptiveness</b>			
Coursework emphasized: SYNTHESIZING and organizing ideas, information, or experiences into new, more complex interpretations and relationships.	3.14	2.91	2.79
<b>Core Communication &amp; Quantitative Skills</b>			
Institutional contribution: Writing clearly and effectively	3.19	2.98	2.88
<b>Critical Thinking</b>			
Institutional contribution: Thinking critically and analytically.	3.30	3.07	3.08
Coursework emphasized: ANALYZING the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components.	3.41	3.02	2.99

A: The IUPUI non-participant group includes students enrolled in First-Year Seminars, but not in TLCs. This was the most appropriate comparison group.

B: The mean is the weighted arithmetic average of student responses on a particular item. Means are provided by NSSE for IUPUI and all comparison groups. The TLC and IUPUI non-TLC means are not weighted.

C: The Selected Peers included University of Alabama at Birmingham, University of Colorado at Denver & Health Sciences Center, University of Wisconsin-Milwaukee, Virginia Commonwealth University, Wayne State University, and Wright State University.

Note: All response scales are based on a 1-4 point scale where 1 = “never” and 4 = “very often” or 1 = “very little” and 4 = “very much.”

Figure 6. The Principles of Undergraduate Learning, National Survey of Student Engagement and IUPUI Themed Learning Communities



The Carnegie Foundation's Community Engagement Classification identified IUPUI as one of the 240 engaged campuses in the US.

Diverse Interactions Engagement Indicator, CSL staff used Design Thinking strategies to better conceptualize how diversity affects their work and how reflection strategies might be used to enhance student development around diversity. CSL staff have also used data from the Deep Approaches to Learning Scales in their scholarly work on the relationship between participation in service-learning and deep approaches to learning. Data like these were used in the 2015 application for the Carnegie Foundation's Community Engagement Classification, which identified IUPUI as one of the 240 engaged campuses in the US. IUPUI has historically used data to inform the creation of educational interventions, and the institution's ongoing

innovation keeps data alive in present-day conversations about the institution's future. IUPUI continues to put NSSE results to good use. Over several NSSE administrations, both IUPUI senior and first-year respondents were more likely to indicate that they were working more than 20 hours per week off campus compared to similar students at peer institutions.

As a result, IUPUI plans to remain focused on several initiatives designed to encourage more students to work on campus. In the last 15 years, IUPUI has used NSSE data in comprehensive ways, from measuring achievements related to their PULs to informing needed conversations regarding campus diversity.

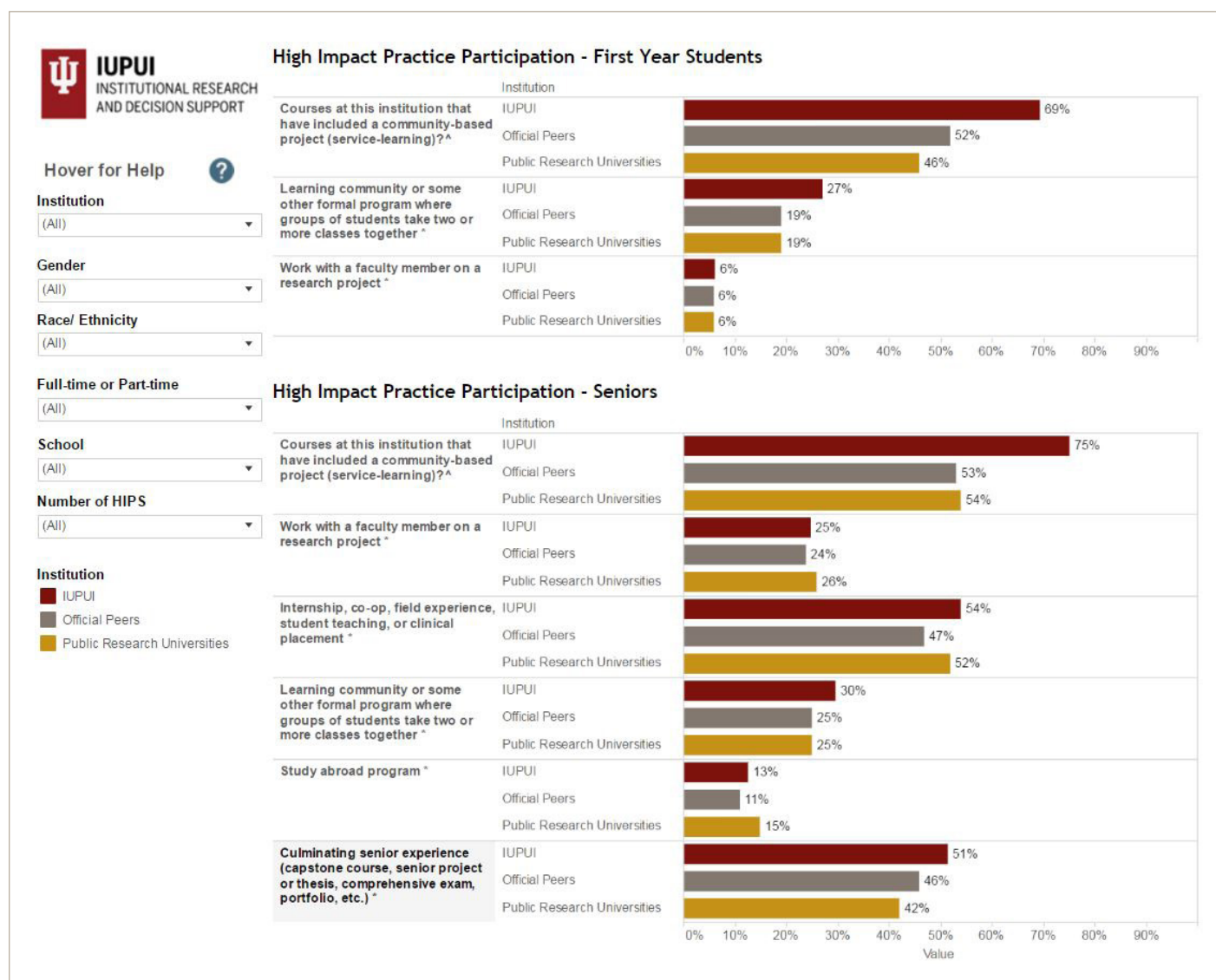


Figure 7. IUPUI HIP Participation Via Tableau Visualization Software

# Using Results to Incorporate Diversity on a Faith-Based Campus

## BIOLA UNIVERSITY

Using data from the various sources helped identify where students are exposed to diversity as well as opportunities to introduce diversity within the curriculum.

Results from Biola University's first administration of NSSE, in 2013, indicated lower scores than those of their peer groups on the Discussions with Diverse Others Engagement Indicator. For their administration of NSSE 2015, Biola intentionally customized their comparison groups and had similar findings—providing the basis for investigating further their students' engagement with individuals different from themselves. In an effort to fully understand these data, Biola conducted additional analyses including individual item analysis, disaggregating by race/ethnicity, and reviewing open-ended responses for diversity-related themes. Among the findings that stood out, compared to their peers at other faith-based institutions, Biola students scored lower on items querying the frequency of discussions with “people with religious beliefs other than your own” and “people with political views other than your own.”

Biola University



The NSSE findings were especially noteworthy given the responses of Biola students on the Taylor University Christian Life survey indicating that over 90% of them felt the institution had helped them connect their faith with culture and society. These potentially conflicting findings called for deeper probing, inspired new conversations on campus, and raised the question: What is Biola doing to prepare students to truly engage with culture and society, particularly with individuals who are different from them?

All of these findings were shared with the University Academic Council, which is chaired by the Provost and consists of academic deans and members of the Provost's cabinet, promoting a powerful campus discussion on how the institution was incorporating diversity into the curriculum. Using data from the various sources helped the council identify where students are exposed to diversity as well as opportunities to introduce diversity within the curriculum; for example, the council considered ways to incorporate diverse voices and texts in required theology courses. To encourage faculty to incorporate a more diverse curriculum, as part of Faculty Investment Day, faculty were offered a one-day training opportunity including breakout sessions and faculty panels with titles such as Teaching the Complex and Controversial: Practical Strategies for Engaging Students in Transformational Learning; The Black Lives Matter Movement, Evangelical Churches, and Biola Classrooms; Engaging Online Students in Cross-Cultural Learning; and Transforming the Classroom into a Real Life Experience: Engaging Students Cross-Culturally in the Community.

While Biola continues thinking about how to address the diversity-related NSSE findings on their campus, a staff member from the office of the Vice Provost of Inclusion and Cross-Cultural Engagement has been added to the undergraduate curriculum committee to help them critically examine how the curriculum addresses diversity. Biola also intends to continue the conversation about creating more opportunities for faculty training in pedagogy and inclusion in the classroom.

# Using BCSSE and NSSE Data to Inform Predictions and Improvements

## SOUTHERN CONNECTICUT STATE UNIVERSITY

**The results of the predictive models using BCSSE data indicated that student success is all about relationships.**

Every year since its inauguration in 2007, the Beginning College Survey of Student Engagement (BCSSE) has been administered at Southern Connecticut State University during orientation, and the institution has been pushing the boundaries of how colleges and universities use BCSSE data. As part of the First-Year Experience (FYE) Program, all incoming students are enrolled in a seminar that promotes their academic habits of mind, research skills, and preparedness for more advanced coursework. This seminar extends students' orientation into the future and guides them in developing action steps in the here-and-now to achieve their desired futures.

Prior to the first day of classes, the FYE seminar instructors receive a BCSSE Student Advising Report for each student, which provides individualized information regarding a student's commitment to the institution, expected academic difficulty, and self-perception of academic preparation for college. When guiding faculty on how to use this information to gauge a student's confidence and needs, the

Office of Assessment and Planning emphasizes that, rather than spelling out a student's destiny, BCSSE data provide a roadmap on how best to support the student during this crucial transition. At Southern Connecticut State University, the focus is on that which is amenable to change rather than unchangeable demographic characteristics and prior learning.

The Student Success Task Force, chaired by the Dean of the School of Arts and Sciences and the Vice President for Student Affairs, used BCSSE data along with other sources of data in predictive modeling to identify the most important predictors of student academic learning, persistence, and graduation outcomes. Of the information collected by BCSSE, the item "Do you expect to graduate from this institution?" was a significant predictor; not surprisingly, students who responded "Uncertain" were less likely to be retained compared with students who answered in the affirmative. Other important predictors included students' expected difficulty with time management; preparedness to speak clearly and effectively; and frequency of talking with a counselor, teacher, or other staff member about university or career plans.

More than this, the results of the predictive models using BCSSE data indicated that student success is all about relationships. The Student Success Task Force's recommendations led to the creation of the Academic Success Center and the modification of academic programs, policies, and instruction as part of a drive to advance a culture of student-centeredness at the university. Specifically to help students plan for the cost of education and manage their financial obligations, a new position was created: Coordinator of Student Financial Literacy and Advising.

BCSSE and NSSE data have been used at Southern Connecticut State University in numerous other ways as well. For example, using data from NSSE's Academic Advising Topical Module (along with other sources of information) to identify issues with the campus's advising practices, the institution implemented the Education Advisory Board's Student Success Collaborative advising platform, and university staff continue to use data from the advising module to evaluate this initiative. Additionally, analysis of BCSSE and NSSE data trends conducted by the Office

Southern Connecticut State University





**BCSSE and NSSE results contribute to the university's data-driven process of educational change and, in response, the university changes the way it works on behalf of students.**

of Assessment and Planning underscored the importance of paying attention to the specific needs of students who are the first in their families to attend college.

One outcome from this analysis was the implementation of a special High-Impact Practice offering, First-Generation College Student Living and Learning Communities, whose students are enrolled together in focused FYE seminars and live together in dorms and with staff members who themselves had been first-generation college students. This program has had real success. First-generation students who participated in this High-Impact Practice had the highest score on the NSSE item measuring students' overall evaluation of their entire educational experience at the institution, and they were almost 10% more likely than their nonparticipating counterparts to persist at the institution.

Southern Connecticut State University is currently considering the factors that promote and impede on-time graduation. The most important predictors of on-time graduation include the characteristics of the students'

incoming profile, the students' goal-directed activities, their confidence that they would seek and identify additional resources to better understand course-related materials, and their expected difficulty in getting help if they are struggling with coursework. Results from BCSSE and NSSE can provide data illuminating these predictors.

Overall, BCSSE and NSSE results inform important conversations at Southern Connecticut State University about the most effective ways to promote students' learning and development. Infographics depicting key survey findings and important predictors of student success are used to spark discussions during meetings. BCSSE and NSSE data highlight areas in which the university has scored higher than its peer institutions—particularly in the Discussions with Diverse Others and Student-Faculty Interaction Engagement Indicators—and the data also identify areas in need of improvement. BCSSE and NSSE results contribute to the university's data-driven process of educational change and, in response, the university changes the way it works on behalf of students.

### TIPS FOR INCREASING NSSE DATA USE IN STUDENT AFFAIRS

To maximize the ways NSSE informs practice, we encourage institutions to expand the groups of users of NSSE data on their campuses. Student affairs professionals, for example, are often an untapped resource when it comes to examining NSSE data and using findings to promote student success.

NSSE items represent empirically confirmed best practices, and their results can be used to inform decision making and practices within student affairs units. To encourage NSSE data use among student affairs professionals, we offer these considerations:

- Identify which NSSE items give insight into critical aspects of student life including time spent on various activities (e.g., co-curricular activities), participation in High-Impact Practices, and percentage of students holding a formal leadership role.
- Use NSSE to assess campus strategic goals and program effectiveness through the survey's questions about student behavior and perceptions. For example, to what extent do you work with peers in and outside of class on projects? To what extent does your institution emphasize providing support to be involved socially?
- Use NSSE to get a deeper look within student affairs functional areas. For example, Career Services may be interested in the proportion of students engaging in internship experiences, or Residence Life can examine engagement differences between students living on and off campus.
- Disaggregate findings by important student characteristics such as racial/ethnic identity, gender identity, and first-generation status.

The NSSE Item Campuswide Mapping document might prove useful in identifying which NSSE survey items are of interest to various departments, units, and committees at your institution.

[nsse.indiana.edu/pdf/NSSE\\_Item\\_Campuswide\\_Mapping.pdf](https://nsse.indiana.edu/pdf/NSSE_Item_Campuswide_Mapping.pdf)

# Blueprint for Maximizing Participation and Data Use

## UNIVERSITY OF HAWAI'I AT MĀNOA

All of these efforts of putting NSSE data into users' hands and linking data with program improvements provides the Mānoa community with a better understanding and appreciation of the importance and usefulness of NSSE results.

The University of Hawai'i at Mānoa exemplifies how investing in student buy-in to raise response rates and creating innovative tools to inform and engage users enable an institution to get the most out of its National Survey of Student Engagement (NSSE) data. The Mānoa Institutional Research Office (MIRO) shifted from its past supporting role in producing NSSE reports to a proactive role in leading campus efforts to improve the NSSE response rate. Its focus now is on efforts to use NSSE data to support improvements in key areas. As part of MIRO's follow-up research and the creation of an action plan, a cross-functional team will attend the second annual National Institute for Teaching and Learning, where participating campus teams will develop evidence-based action plans aimed at improving instructional practices, student engagement, and student learning and success. In an attempt to get NSSE data into the hands of those who can use the information to inform decision making, MIRO has reached out to campus units through strategies such as customized reports, online interactive data reporting tools, video tutorials, and face-to-face discussions and training.

For NSSE 2015, MIRO carried out a comprehensive marketing strategy that included several key steps to promote survey participation among first-year and senior students. First, the office coordinated campus-wide advertisements for the survey on dozens of banners and boards as well as hundreds of flyers in first-year and senior residence halls. Second, based on research on the relationship between the use of incentives and increases in response rates, rewards for participants were offered through a drawing for prizes such as an iPad Air 2 and 20 bookstore gift cards. Third, student resources with information about the survey were provided, including a landing page on the MIRO website featuring frequently asked questions such as: "What is the National Survey of Student Engagement (NSSE)?" and "Why should I take part?" The office also organized

visits to some of the largest first-year classes to present information about the survey and to encourage participation.

On days when the survey was being administered, information tables were staffed around campus—a service coordinated by student members of the American Marketing Association. With the currency of social exchange as the guiding principle, students were offered snacks and pens with NSSE information notes as they gained awareness about the survey. Prior to the survey administration, MIRO presented its marketing plans to the academic deans, who in turn supported the effort by advertising the survey in their buildings, hosting survey administration parties, doing their own tabling for the survey, and encouraging faculty to promote the survey. Finally, during administration, advertisements were updated to include the end date of the survey period, thereby reminding students to complete the survey before the deadline. To better understand the effectiveness of those promotion strategies, MIRO entered survey response rate data on a daily basis and used the NSSE interface to track changes in response rates.

It was clear that the efforts put forth by MIRO paid off. Compared to the 2011 administration of NSSE at the University of Hawai'i at Mānoa, response rates for NSSE 2015 doubled from 16% to 32%. Closing the loop on this project, MIRO posted an online video showing the steps taken to improve survey participation and the university's favorable response rate compared with those of other institutions. MIRO also compared NSSE responses with enrollment data to demonstrate that the survey sample adequately represented the overall student population along the characteristics of class standing, gender and race. This final comparison can (a) persuade skeptics of the representativeness of information derived from NSSE and (b) provide strong evidence of the success of campus partners in promoting the survey. These efforts complement other efforts of MIRO to expand access to NSSE data.

MIRO has also created innovative ways to disseminate NSSE findings to different academic units and offices on campus to enhance their capacity for data-based decision making. Outreach efforts include developing interactive data tools to help departments and academic

University of Hawai'i at Mānoa



**The university's institutional research office serves as an excellent resource in assuring that the educational practice and policy decisions of individual units are informed by NSSE information and data.**

units access NSSE data and conduct data mining in ways that answer specific questions about student engagement. Central to the design and functionality of the web apps that MIRO developed for NSSE data is the ability to “slice and dice” the data based on one or more variables (e.g., gender, race/ethnicity, college, department and many others). The visually appealing report designs enable users to quickly identify data trends. The office also created customized presentations and video reports for student affairs and academic affairs units to focus on three aspects of student engagement: supportive environment, diverse perspectives and student accountability. In addition, MIRO hosted face-to-face training sessions on how to use NSSE data (eight sessions in one semester) and developed virtual tools that include video tutorials, scenarios for use, and follow-up surveys. These tools and data sharing strategies have garnered positive feedback from various offices on campus. By placing data into users’ hands, creative ways of using data to drive decisions have become possible.

To gain a better understanding of one of the areas identified for improvement, MIRO administered a follow-up survey, in July 2016, consisting of five open-ended questions looking at different perspectives of the University of Hawai'i at Mānoa's supportive environment. Nearly 1,800 students responded, generating nearly 9,000 total responses. MIRO created an interactive online reporting tool allowing decision makers to quickly locate students’ responses from different student populations on specific issues and campus services. These

qualitative results provided critical and meaningful information from student voices. To generate real campus change using NSSE results, in August 2016, MIRO's director led a cross-functional Mānoa team at the National Institute for Teaching and Learning, where they used data from NSSE and the supportive environment survey to develop an action plan to enhance the university's supportive environment for student success.

All of these efforts to put NSSE data into users’ hands and to link data with program improvements provides the Mānoa community with a better understanding and appreciation of the importance and usefulness of NSSE results. With increased awareness, the University of Hawai'i at Mānoa is likely to enjoy an even more desirable NSSE response rate in the next administration period, which will bring more NSSE data to use for campus decision makers. This healthy and sustainable process works and can be replicated at other institutions.

While recognizing that individual units are in charge of making changes in their educational practice and policy, the institutional research office at the University of Hawai'i at Mānoa serves as an excellent resource in assuring these decisions are informed by NSSE data. Its investment in both the participation and the data use aspects of survey research provides a blueprint for how users can maximize NSSE data to better serve their students.



# Mapping NSSE Items and Developing Faculty

## CARLOW UNIVERSITY

**In these uses of NSSE data, Carlow University has done outstanding work using specific data points in the survey results to guide interventions.**

The Office of Institutional Research, Effectiveness, and Planning at Carlow University maximizes information derived from NSSE results by using data from both the core survey and the Topical Modules. In 2014, Carlow administered NSSE and participated in two modules: Learning with Technology and Experiences with Information Literacy. Analysis of these data contributed to the development of explicit guidelines for a new core curriculum and the improvement of instruction by faculty.

Mapping Carlow's NSSE results to specific action steps was linked to the new core curriculum guidelines. For example, in one document the survey item, "worked with a faculty member on activities other than coursework" was connected to actions such as educating students about co-curricular opportunities in the "Connecting to Carlow" course and the development of a co-curricular transcript. The Office of Institutional Research, Effectiveness, and Planning developed a graphically enhanced chart that (a) identified the NSSE survey item, (b) compared Carlow's performance with the national average (e.g., a "thumbs up/neutral sign/thumbs down" picture), and (c) listed all of the new core curriculum components intended to ameliorate the concerning findings.

By reimagining NSSE results in a single chart—or "crosswalk"—the office developed an easy-to-understand information display tool that clearly delineated connections between data and action. For example, low NSSE scores from seniors for faculty feedback on a draft or work in progress were addressed by creating various skill labs (i.e., academic support experiences to help students develop communication, writing, and quantitative reasoning skills), by implementing a writing-intensive curriculum in the critical exploration courses, and by embedding assessment checkpoints during junior year seminars.

Because NSSE results also indicated participation rates in some High-Impact Practices (HIPs) were lower at Carlow than at other institutions, an action step called for the inclusion of five HIPs in the core curriculum (writing intensive curriculum, capstone courses, service-learning experiences, internships, and research opportunities with faculty). Although several of these HIPs were already in the curriculum, a conscious decision was made to bolster and expand them in the new curriculum. Not only has the crosswalk streamlined conversations regarding interventions to enhance student engagement, the document also serves as an easy-to-reference guide for measuring the effectiveness of these interventions.

Carlow University plans to administer NSSE in 2018 and is excited to see if scores on the targeted items improve after implementing the new core curriculum, the Carlow Compass (see Figure 8). The Carlow Compass Curriculum, which went into effect for all incoming students in Fall 2016, is an innovative general education curriculum rooted in the liberal arts and the Catholic intellectual tradition. Serving as a navigational tool to guide students toward academic and professional goals, it is integrated with a student's major course of study and aligns with the university's mission, vision, and Mercy heritage.

Carlow University also used NSSE results to support and guide strategic priorities in other areas of the academic enterprise. While excelling in many aspects of student engagement and practice, Carlow obtained results from NSSE's Learning with Technology Topical Module indicating it lagged behind its peers in integrating technology into undergraduate education. In the module, students are asked about the degree to which technology contributed to their learning activities such as understanding course ideas and

Carlow University



These steps have been essential to understanding how to improve student engagement and linking this understanding to actual intervention.

collaborating with other students. The module also includes questions regarding the types of technologies used in class and the degree to which the student's institution emphasized various types of technologies. The module results indicated that Carlow students were less likely to use certain technologies inside the classroom (e.g., electronic textbooks, e-portfolios, social networking) compared with students at other institutions participating in the module.

As a follow-up action, Carlow organized an internal professional development institute for all faculty and staff in spring 2016. The institute's theme—Back to the Future: Carlow's Journey of Innovative Technology—focused on sharing faculty successes at implementing technology as a way to inform and motivate late adopters. The institute included a plenary event, three hours of multiple training sessions (topics included Interactive Software Adobe Connect and Camtasia, and Engagement and Motivation through Digital Tools), and an open-house

session during the reception where faculty showcased their technology skills.

In both of these uses of NSSE data—the crosswalk of NSSE items with action steps for the new core curriculum and the examination of student use of technology in the classroom—Carlow University has done outstanding work using specific data points in the survey results to guide interventions. Furthermore, the Director of Assessment for Institutional Research, Effectiveness, and Planning has diligently mapped these items to specific interventions (either in changes to the core or to the professional development opportunity). These steps have been essential to understanding how to improve student engagement and to linking this understanding to actual intervention. Going forward, to evaluate the results of its interventions, Carlow can use data from their future administrations to either prove the effectiveness of these actions or to develop new strategies to enhance these measured outcomes.



Figure 8. Carlow University Compass Curriculum

## Investing All Units and Faculty in Using Results

### OKLAHOMA STATE UNIVERSITY

**OSU is committed to finding new uses of NSSE data and to reaching a broader range of faculty with college-specific resources and support.**

Like many institutions, Oklahoma State University (OSU) is challenged by decentralization. This has complicated its efforts to disseminate NSSE data and reports and to implement change. In the past, although the university's assessment office provided an executive summary report of NSSE results to various offices and academic colleges, this report was not consistently helpful because its broad findings were not specific to the units' various needs and students.

The assessment office has since prioritized providing each unit with data pertinent to that unit's work and the students it serves. The office has also developed resources to make data more accessible to faculty and staff across campus, including a new internal OSU website, dedicated to data and reports, that provides links to NSSE resources and information on accessing the NSSE Report Builder.

Getting faculty more invested in using NSSE results has also been a priority at OSU. In this effort, the assessment office has made it easier for faculty to access NSSE data for their own

research endeavors. For example, two faculty members are comparing the engagement levels of in-state students who received need-based state-sponsored scholarships and those who did not.

Additionally, working with the Institute for Teaching and Learning Excellence (ITLE), the assessment office has helped inform faculty workshops on using NSSE results. In a meeting with the ITLE's support unit of instructional designers and various faculty members, for example, the assessment office provided a two-and-a-half-hour presentation on the implications of NSSE findings for faculty practice at OSU. The presentation included an overview of NSSE, information about the university's recent NSSE response rates and respondent demographics, details about OSU's selected comparison groups, and descriptions of areas of strength and areas for potential improvement. The presentation also included findings from Topical Modules and from BCSSE. The goal of the presentation was to identify what faculty were doing in their classrooms related to student engagement and what they could do to enhance it. One critical area of faculty practice that was identified correlates with NSSE's Higher-Order Learning Engagement Indicator.

Since that presentation to ITLE, enhancing students' higher-order learning across campus has become a focus at OSU. For example, among the newly developed ITLE faculty courses, which are hybrid in-person and online workshops, one of the courses focuses on more thoughtfully matching student needs with teaching methods; more deeply engaging students in content through activities that highlight analysis, application, and evaluation skills; and more closely aligning content assessments to teaching practices so that evaluation is more relevant and reliable. As evidence of this ITLE course's impact, a chemical engineering faculty member who completed the course has converted his lecture-based course into a course incorporating guided problem-solving tasks with embedded informal, formative assessments that allow him to gauge student learning immediately and to make adjustments where necessary.

OSU is committed to finding new uses of NSSE data and to reaching a broader range of faculty with college-specific resources and support.

### UPDATE ON THE ANNUAL TEACHING AND LEARNING NATIONAL INSTITUTE

How can campuses use evidence of students' educational experiences to improve learning and success? Putting NSSE data to use to respond to this question was a key theme of the Teaching and Learning National Institute (TLNI), hosted by The Evergreen State College in summer 2016.

Teams of faculty, student affairs professionals, institutional researchers, and administrators from 29 two-year and four-year institutions focused on using evidence to identify areas of the student experience that could be strengthened and then—building on what is known about successful practices—to shape more effective approaches both in the classroom and outside the classroom.

Co-sponsored by NSSE, the Washington Center at the Evergreen State College, the Washington State Board for Community and Technical Colleges, the National Institute for Learning Outcomes Assessment, and Achieving the Dream, the Second Annual TLNI was held in summer 2017. [nsse.indiana.edu/html/workshops\\_2016\\_evergreen.cfm](http://nsse.indiana.edu/html/workshops_2016_evergreen.cfm)



# Student Learning Analysts Build Campus Interest and Investment in Assessment

## BOWLING GREEN STATE UNIVERSITY

Incorporating students' interpretation of data and recommendations for practice can have a significant impact on campus unit decisions.

Using assessment data innovatively at Bowling Green State University (BGSU) has become a priority in the last few years. To aid in this effort, in 2016, the Office of Academic Assessment created the Student Learning Analysts (SLA) position, "in which undergraduate students take an active role in gathering information on student learning experiences," to help ensure student voices are truly represented in the assessment of student learning—including in the interpretation of the data and the recommendations for practice. Students in the SLA position learn to design assessment projects, collect and analyze data, and present findings to various members of the BGSU community. The Vice Provost of Institutional Effectiveness and Associate Director of Academic Assessment,

who work with these students, believe the SLAs support the larger data-driven philosophy on campus and increase investment by campus units in institutional assessment work. Incorporating students' interpretation of data and recommendations for practice can have a significant impact on campus unit decisions.

Students hired for the SLA program were drawn from a variety of majors, class standings, and experience levels—but all demonstrated an interest in assessment and student learning. After receiving training in assessment techniques, the SLAs started their projects. In their first semester, they conducted focus groups related to students' expectations about learning and engagement in the classroom (see Figure 9). In their second semester, as they developed assessment projects directly related to NSSE, they learned about engagement and the types of data NSSE provides—and used these new skills to craft focus group questions related to three NSSE Engagement Indicators: Learning Strategies, Higher-Order Learning, and Reflective and Integrative Learning. One of the focus group questions related to Learning Strategies was "How do you study and review your notes?" Another question, related to Higher-Order Learning, was "How is critical thinking applicable in other aspects, such as internship, organizations, etc.?" In a question related to Reflective and Integrative Learning, the SLAs asked "Explain how your classes help you look at issues or topics with a new perspective." Following the focus groups, the SLAs analyzed and coded their data and began to identify findings to share with various groups on campus (e.g., Teaching and Learning Fair, General Education Committee, Faculty Administrator groups, etc.). The SLAs are also committed to finding unique visual ways to share their findings to make them as accessible as possible.

Although still new, the SLA program has already seen some unintended—but positive—outcomes. Students who participated in the focus groups, for example, have expressed interest in the SLAs' assessment work and are thinking about how they can use assessment to inform their own experiences (e.g., activities with student organizations). To build on this growing interest, the Office of Academic Assessment at BGSU is considering ways to expand the SLA program in the future after ensuring its short-term success.



Figure 9. Student Learning Analysts' Engagement in the Classroom Focus Groups Summary

# NSSE Data-Informed HIP Planning and Accreditation Reporting

## CALIFORNIA STATE UNIVERSITY SAN MARCOS

**CSUSM is making progress toward establishing a culture of data to inform action and to demonstrate student learning outcomes.**

California State University San Marcos (CSUSM) is a Hispanic-Serving Institution that is focused on the students they serve, an undergraduate population among whom 42% identify as Latino/a, 54% are first-generation, and 47% come from low-income backgrounds. Institutional researchers at CSUSM use NSSE data to learn more about their student population and to provide evidence that can be used to best serve them—for example, to confirm that CSUSM students spend more hours working for pay than do students at similar institutions. Findings like this inform the collective understanding of the student population and guide campus conversations on how to best support these students.

NSSE data are also used to underpin efforts like the benchmarking of Co-Curricular Competencies conducted annually by the Division of Student Affairs. The division reorganizes data from NSSE and from the Cooperative Institutional Research Program (CIRP) College Senior Survey under domains such as Civic Engagement and Social Responsibility or Critical Thinking and Ethical Reasoning, using the data to inform conversations regarding student learning in these areas.

High-Impact Practices (HIPs) such as the first-year seminar, internships, and undergraduate research are a leading priority at CSUSM. Emblematic of this institutional emphasis, a HIP task force composed of faculty, staff, and administrators with interest or involvement in campus HIPs used NSSE data to disaggregate student participation in these practices by student major and demographic characteristics. These data can help educators identify student groups that are less likely to participate in HIPs and to direct them to HIP opportunities—interventions that are especially impactful for students such as first-generation or low-income students who might not otherwise seek out these opportunities.

CSUSM stakeholders have used NSSE data to measure the overall effect of efforts to improve HIP participation, and the data suggest interventions like these are working. Encouragingly, results from the institution's NSSE 2016 administration indicated that HIP participation has increased. Also, using common data reference points has facilitated cross-division collaboration at the university, as all entities work from the same data points and share a common framework for conversations to identify needs and plan interventions.

NSSE data have also played an important role in the CSUSM WASC Senior College and University Commission (WASC) accreditation process—providing evidence in their institutional report of achievements in university-wide Undergraduate Learning Outcomes (ULOs), mapped to WASC standards. For example, CSUSM found that their students were more likely than those at other California State University institutions to engage in behaviors associated with higher-order learning and used this information to articulate the ways in which their students had developed skills as Comprehensive and Critical Thinkers (one of the four ULOs). Similarly, for the Skilled Communicators ULOs, the institutional report noted high scores for the frequency at which students give presentations in class and for crediting their university experience for the development of oral communication skills. Lastly, the CSUSM institutional report used NSSE data to illustrate high levels of satisfaction among students.

In concert with other data sources, such as CIRP's freshman and senior surveys and the American College Health Association–National College Health Assessment survey, CSUSM expertly aligned their own institution's ULOs with WASC standards and used evidence from NSSE to highlight achievements in student learning on their campus. CSUSM is making progress toward establishing a culture of data to inform action and to demonstrate student learning outcomes.

# Developing and Assessing Opportunities for Entrepreneurial Learning

## ROSE-HULMAN INSTITUTE OF TECHNOLOGY

Working to be more intentional in how data are shared across campus, Rose-Hulman used the Report Builder to break down the findings by specific engineering majors.

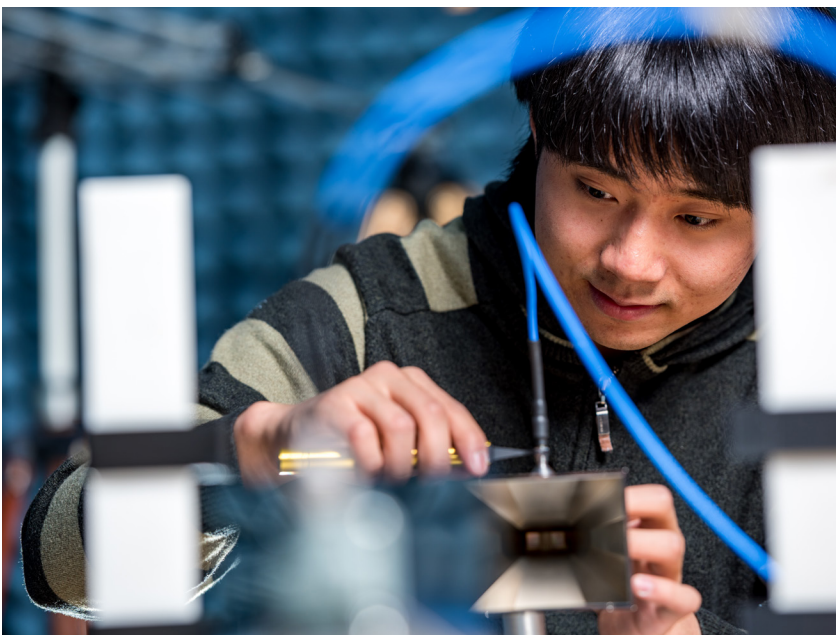
In 2014, Rose-Hulman Institute of Technology received a grant from the Kern Family Foundation as part of the Kern Entrepreneurial Engineering Network to develop for engineering students entrepreneurial minded learning (EML) opportunities that foster an entrepreneurial mindset and enterprising attitudes. Rose-Hulman President James Conwell said that the grant—combined with the goals and mission of the institution—would play an important role in preparing graduates to positively contribute to the American workforce. This grant has supported a number of educational initiatives at Rose-Hulman, such as engaging faculty in multidisciplinary groups to create EML-infused courses in each academic discipline, including the humanities and social sciences. Rose-Hulman has also developed a new living-learning community, the Engineering Student Community Actively Learning Advanced Technical Entrepreneurship (ESCALATE), in which 50 first-year students who live and take courses together are connected to student and alumni mentors.

Rose-Hulman Institute of Technology

To assess the impact of their efforts to infuse EML initiatives throughout the institution both in and outside the classroom, in their NSSE 2015 administration, Rose-Hulman appended the First-Year Experiences and Senior Transitions Topical Module. A number of items in this module were identified as having the potential to measure progress toward EML goals—particularly, in the senior students' section of the module, the items related to entrepreneurial skills, self-employment, and starting your own business. The module findings are serving as benchmarks as Rose-Hulman extends EML initiatives across the institution, with plans to readminister the module in 2018.

Rather than wait for the 2018 data for longitudinal comparisons, however, Rose-Hulman chose to use the existing data to examine what was already happening on their campus. Results from the module's first-year experience section, for example, gave insight into the impact of College and Life Skills—a course designed to help first-year students make a smooth transition from high school and to introduce them to important resources and individuals at Rose-Hulman. Compared to first-year students at peer institutions, the results showed that Rose-Hulman students were much more likely to seek additional information for course assignments when they didn't understand the material and to ask instructors for help when they struggled with course assignments.

Rose-Hulman has also been working to be more intentional in how data are shared across campus. For example, to address some challenges in using the Major Field Report as a small institution with most students in engineering programs, Rose-Hulman used the Report Builder–Institution Version to break down the findings by specific engineering majors. Each academic program received its own individualized report including institution-wide findings, departmental findings, departmental comparisons to other U.S. institutions, and data use resources. Supporting greater use of NSSE results at the program-level and outlining a plan to employ student engagement results to monitor the infusion of EML have been effective approaches for making data use more widespread at Rose-Hulman.





## Data Visualization to Excite Interest in HIPs and Their Benefits

### UNIVERSITY OF TORONTO

This succinct data display creates an enticing narrative for stakeholders to articulate the value of these educational programs.

Communications, assessment, and senior leadership from the Division of Student Life at the University of Toronto (U of T) seek to share information on the success and influence of the university's educational programs. Although increasing student participation in High-Impact Practices (HIPs) is a major goal for the institution, presenting data in a way that inspires interest and change among educational units has been challenging. Through new, compelling data visualization techniques, however, NSSE data have been used to show the relationship between

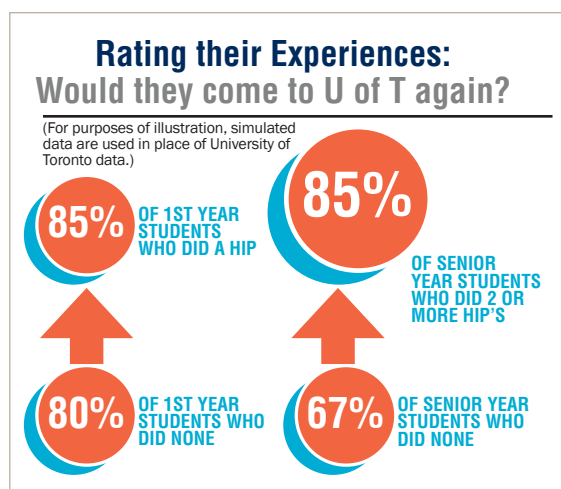


Figure 10. Relationship of HIP Participation and Satisfaction with U of T

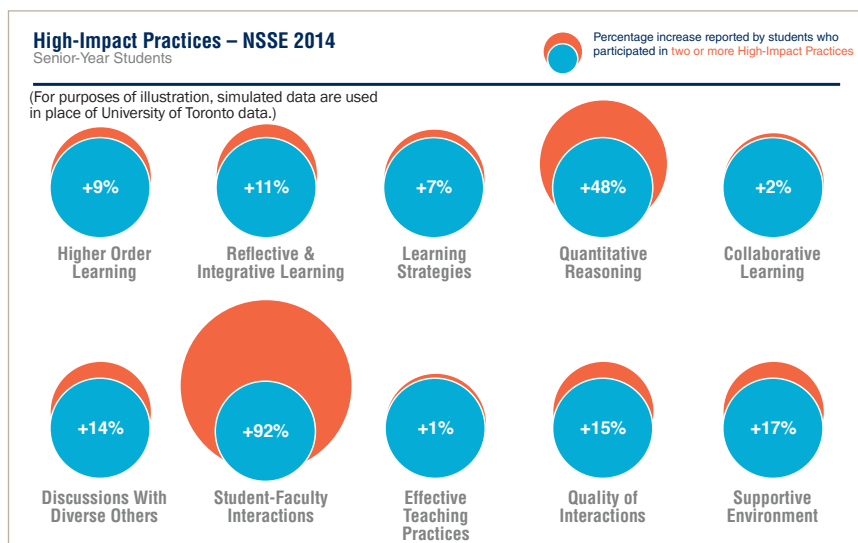


Figure 11. Relationship of HIP Participation and NSSE Engagement Indicators

participation in HIPs with student satisfaction and engagement and to generate interest in and conversation about HIPs across campus.

Figure 10 links HIP participation to responses to the survey question, "If you could start over again, would you go to the same institution you are now attending?" Results indicated a small increase in affirmative responses among first-year students who participated in one HIP (5%). However, the affirmative increase among seniors who participated in at least two HIPs was substantial (18%) compared to seniors who participated in none. Simply put, seniors who participated in at least two HIPs were more satisfied with their university than those who did not participate at all in HIPs. Reimagining these data in a new, succinct display allows educators to clearly understand this relationship and creates an enticing narrative for stakeholders to articulate the value of these educational programs.

Figure 11 displays more detailed differences in engagement between seniors who participated in at least two HIPs and those who did not participate in a HIP. The results of this analysis indicate increases in each of the ten NSSE Engagement Indicators for seniors who participated in HIPs, particularly in areas of student-faculty interaction, collaborative learning, and quantitative reasoning. The layout of this display is easy to grasp and clearly communicates the message that students who participate in HIPs are more engaged than those who do not. Also, the image allows the viewer to easily understand the degree to which HIP participation increases student engagement for each of the indicators. This neat and simple graphic of a seemingly complex relationship clarifies a key point: Students who participate in HIPs are more engaged.

With design support from their communications team, senior leaders in the Division of Student Life at the University of Toronto have shared these visualizations and data across the university—with individual departments, faculty members, registrar staff, librarians, and student life staff. As a result of these new data formats, campus conversations about the implementation of HIPs have grown broad and deep. The visualization of these data present a robust case for the importance of HIPs, moving educators past "Why do them?" to "How can we best do them?"

## Quick Takes

### Data-Infused Campus Conversations About the Needs of Diverse Student Populations

#### UNIVERSITY OF MINNESOTA DULUTH

Every summer and January, in preparation for the upcoming term, the University of Minnesota Duluth (UMD) Division of Student Life holds a retreat for the division directors on a topic both related to the goals of the institution and applicable to the work of the division's departments and programs—student activities, recreational outdoor sports, student conduct, housing and residence life, diversity and inclusion, and others. In 2016, the retreat included a common reading of *Diverse Millennial Students in College: Implications for Faculty and Student Affairs* (Bonner, Marbley, & Howard-Hamilton, 2011) and conversations about how these implications related to students at UMD, identifying areas where UMD was successfully meeting the needs of its

various student populations and where it might be having some difficulty. Infused into these conversations were UMD's NSSE 2014 results—with a focus on data related to retention and student success, particularly for students of color. Important findings included the following: UMD's first-year students of color rated their interaction with staff lower than did their peers at other institutions; first-year female students were more likely to utilize academic support resources than were their male peers; and senior students of color had more outside responsibilities (work, family, etc.) potentially impacting their ability to manage academic commitments than did their peers in other racial-ethnic groups.

These data elicited a number of questions: Is the Division of Student Life doing all it can to proactively meet the needs of diverse populations of students? How should the division retool its approach to recruiting and retaining students of color? Further, how is the division creating a positive environment for all students? At UMD, these questions are being actively considered as the campus's student population grows increasingly diverse.

With a recent plateau in enrollment after a decade of steady enrollment growth, UMD recognizes that it cannot wait for students to tell the institution what they need. Instead, UMD must adjust its practices to provide a high-quality equitable experience for all students on campus. Moving forward, UMD plans to continue infusing NSSE data into its campus conversations, with the intention of making evidence-based decisions to improve practice.

### Creating Specialized NSSE Reports

#### UNIVERSITY OF NEBRASKA-LINCOLN

In an effort to reimagine how NSSE data are shared by distilling actionable and tangible findings from the survey, the Office of Academic Affairs at the University of Nebraska-Lincoln (UNL) reorganized the institution's NSSE data into four UNL Brief Reports: one for instructors; one for student support services; and one each with results from the Global Learning and the Experiences with Diverse Perspectives Topical Modules. Each report contains an overview of NSSE, a description of strengths within the institution, identified areas for improvement, and a conclusion. What makes this effort so innovative is how these reports are specialized for each audience.

The report for instructors includes findings related to teaching such as (a) engagement indicators regarding student-faculty interaction, effective

teaching, and quality of interactions; (b) student behaviors related to reading and writing; and (c) the degree to which students engage in discussions with diverse others or perceive the campus environment as supportive. Among the highlighted strengths in results for the three Engagement Indicators are the higher means for UNL seniors compared to seniors from other Big Ten and Regents institutions.

The instructors' report also includes "A Closer Look," a section in which UNL's item-level successes are detailed (for example, the 6% increase in first-year students who reported "talking about career plans with a faculty member," compared with first-year students at peer institutions). The report provides a similar granular look at the areas for improvement, as first-year students

reported significantly lower levels related to whether or not instructors (a) clearly explained course goals and requirements, (b) taught course sessions in an organized way, and (c) used examples or illustrations to explain difficult points.

This specialized report is important for instructors, for whom assessment of student learning is only part of their job. For them, relating NSSE information to their work can be overwhelming due to the massive amount of data presented in the institutional report. By detailing the ways faculty are succeeding or could better enhance the students' educational experience, the report presents data in a digestible format featuring only the most useful information. Furthermore, this strategy creates specialized tools for the academic affairs staff to use when working with either staff or faculty. The report for instructors and the other UNL specialized reports are excellent demonstrations of assessment experts lowering barriers between data and those who can act on data.

## NSSE, FSSE, and BCSSE Results for Undergraduate Research Projects

### UNIVERSITY OF HOUSTON–VICTORIA

Dr. Sharon M. Bailey, the Director of Institutional Research and Effectiveness at the University of Houston–Victoria, invented an undergraduate research project with the goal of disseminating NSSE results to the greater campus. For this project, two work-study students devised a creative, interactive approach to sharing results. They designed, printed, and folded paper fortune tellers, a form of origami used in children's games, with the institution's BCSSE, NSSE, and FSSE results, making several different versions of the fortune tellers based on different research questions. One showed the average number of hours students work for pay (from NSSE) and faculty perceptions of student time working for pay (from FSSE), providing a conversation-starter about the differences between actual student behavior and

faculty perceptions of student behavior. Another compared students' expectations about how often they would go to class unprepared (BCSSE) with the percentage of freshmen and seniors who reported going to class unprepared (NSSE).

Using the University of Houston–Victoria's NSSE and FSSE reports, the students assigned to this project developed key research skills such as collaborating with peers to coordinate the project and interpret the data and effective reporting skills such as identifying important information, reviewing data for accuracy, and tailoring data to a particular audience.

In the guidebook these student researchers developed to help others create similar paper fortune tellers, they wrote, "Look for pieces of data

from each survey that would go good together. Make sure the data used would appeal to targeted audience." The experiences of these students engaged them in communication, quantitative reasoning, and teamwork. Developing this advertisement for NSSE data required creative energy, and the students were proud of their results.

In the end, these two students designed 14 distinct paper fortune tellers with facts from survey results, and they printed and folded more than 300. The fortune tellers were placed on tables in the student cafeteria and at the faculty and staff appreciation lunch, and the extras were used by the alumni office.

The project was successful in getting campus partners who otherwise might not be familiar with NSSE data to actually see some of the results in their hands. Even a year later, Dr. Bailey ran into faculty and staff who remembered the paper fortune tellers and, in spring 2017, she reprised the project, this time with a message encouraging faculty to participate in FSSE.

## Centering Improvements in Academic Advising for Student Success

### THE OHIO STATE UNIVERSITY

Because advisors can direct students to multiple resources and support services to help them along their education pathways, The Ohio State University (Ohio State) believes improvements in academic advising are essential to ensuring that all students flourish and succeed. To establish a baseline from the student perspective for planning these improvements, Ohio State appended the Academic Advising Topical Module to their 2013 NSSE administration. Additionally, advisors' perceptions about their training and professional development were collected in a survey administered in 2014 by Ohio State.

*Enhancing Academic Advising*, Ohio State's 2014 Higher Learning Commission quality initiative, defined the framework for the improvement effort: "Academic advising requires a collaborative relationship between advisors and students—an active,

sustained, and intentional process, rather than passive, sporadic, and casual contacts." This initiative implemented programs focused on advancing advising to the next level through the following ongoing activities and offerings:

- Training and professional development for advisors
- Assessment of academic advising learning outcomes
- Increased advisor accessibility to and engagement with information to guide and support students
- Enhanced collaboration between advisors and other university offices

To assess the effectiveness of their academic advising quality initiative, Ohio State re-administered the NSSE advising module in 2016. Comparing data from both administrations, the university

found a number of areas in which student responses in 2016 were significantly more positive than in 2013 and no areas in which responses were more negative. Both first-year and senior students responded more positively in 2016 when asked to what extent their advisors helped students understand academic rules and policies and informed students of academic support options (tutoring, study groups, help with writing, etc.). For seniors specifically, Ohio State saw increases in the number of students who said their advisors had been available when needed and listened closely to concerns and questions.

These findings indicate that the ongoing work of Ohio State's quality initiative to enhance academic advising is having a positive impact—which supports the continuation and expansion of this work. Further, Ohio State intends to share these findings to boost advisors' morale, to raise their campus profile, and to promote partnerships with them across campus.



## Enhancing Students' Off- and On-Campus Experiences

### KEUKA COLLEGE

Keuka College, an institution with a unique and unmatched emphasis on real-world experience, uses NSSE data to monitor student satisfaction and engagement in key educational experiences. Every year, every undergraduate student at Keuka College completes a Field Period®—a credit-bearing, off-campus learning opportunity that can resemble an internship or may take the form of community service, spiritual exploration, creative endeavor, cultural exploration, or international travel. These experiences are critical, with 94% of the most recently graduating seniors describing Field Period® as important in assisting with their career development and 20% of Field Period® experiences resulting in full-time employment of graduates. A cornerstone

of the Keuka College curriculum since 1942, Field Period® is represented in 10% of degree requirements for every undergraduate major. For the college's first-year students, the First-Year Experience seminar is crucial because it is their first opportunity to learn about the Field Period® process.

While Keuka College has been intentional in supporting its first-year students through traditional methods like orientation and academic advising, institutional stakeholders noticed that NSSE results indicated first-year students reported low quality interactions with students, advisors, faculty, and staff. This finding led to numerous conversations on campus about how best to foster interaction between first-year students and other campus community members,

and changes to the curriculum and campus culture were implemented. For example, the first-year experience course was revamped to allow for more opportunity for students to interact with faculty on interesting topics such as Exploration of Multicultural Education, Adventure and Recreation, and Leadership.

In another implemented change, advising and course registration were incorporated into New Student Orientation to encourage engagement with faculty. Additional initiatives are being considered to actively engage students past the first semester through additional revisions of the first-year experience. Also, in the fall of 2016, every incoming student was assigned both a major advisor and a student success advisor, forming a team committed to collaborative and proactive advisement to support each student's persistence and success. As a participant in NSSE every other year, Keuka College is excited to see if these implemented changes enhance their Quality of Interaction scores.

## Campus Transitions Open Pathways for Data Use

### NORTH CENTRAL COLLEGE

After several years of modest NSSE data use, North Central College realized a significant increase in interest in student engagement results by a number of campus constituents. Organic conversations about using NSSE data to inform campus practices followed a few transitions in campus leadership and faculty involvement: a new provost, who has encouraged a greater use of partnerships between academic and student affairs; a new director of the Center for the Advancement of Faculty Excellence, who had used engagement research in her own scholarship; a new director of undergraduate research, who has been eager to learn more about the kinds of students engaging in undergraduate research; and faculty who have been increasingly embracing the idea of greater participation in High-

Impact Practices (HIPs). Capitalizing on the potential of these transitions, North Central gave new faculty an orientation session that encouraged them to think about their influence on students' engagement. Facilitated by North Central's vice president for student affairs and dean of students and a group of student leaders, this session sought to empower faculty to think about small adjustments they could make in their own classrooms and in their interactions with students outside the classroom to increase student engagement. North Central also hosted a similar conversation with student affairs staff—having them look at findings within subpopulations including HIP participation by race/ethnicity and gender and in the aggregate to get an idea of how students were experiencing the institution.

Meanwhile, a strategic planning process has been under way at North Central College, and the college has reflected intentionally on the measures important to this process. Instead of relying solely on college and university rankings for progress benchmarks, institutional leaders have asked to know more about what students actually do. In response, at a presentation to the college's board of trustees, the vice president for student affairs and dean of students used NSSE data to illustrate student engagement as an indicator of educational quality and to provide the board a view of the college's performance through its NSSE results and reports. A similar presentation using NSSE data was given to student affairs staff, and the attendees also discussed ways to improve student learning and development with NSSE indicators in mind. North Central continues its efforts to ensure that all campus units know how the construct of student engagement and the data from NSSE can help create successful educational environments for students.

# Concluding Thoughts

*“The NSSE reports provide valuable information, particularly if an institution is in the process of strategic planning or needing to report on progress.”*

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ALICE GRIFFIN,  
DIRECTOR OF  
CURRICULUM REVIEW  
AND PROGRAM  
ASSESSMENT,  
UNIVERSITY OF  
ARKANSAS

A core goal in higher education assessment is the use of evidence for decision making. Encouragingly, as shown in the National Institute of Learning Outcomes Assessment (NILOA) report, *Knowing What Students Know and Can Do: The Current State of Student Learning Outcomes Assessment in U.S. Colleges and Universities* (Kuh, Jankowski, Ikenberry, & Kinzie, 2014), the use of assessment findings to improve quality in undergraduate education has increased. The data use examples featured in this fourth volume of *Lessons from the Field* provide confirmation of this.

More notably, though, these instructive examples demonstrate deeper levels of data use to enhance understanding of educational practice and to motivate action on results. California State University San Marcos used NSSE data to measure the achievement of their institutional learning outcomes for accreditation. Bucknell University used NSSE data to focus attention on diversity initiatives and to study the impact of campus living-learning communities. NSSE data have also informed campus planning efforts, including curricular change and improvements to instructional practice. At the University of San Diego, results from the Information Literacy Topical Module motivated faculty to incorporate teaching information literacy skills into the core curriculum historical inquiry requirement. At Andrews University, NSSE results informed faculty about specific types of feedback to students to improve their performance.

While the institutional examples in this volume show how institutions have successfully employed their NSSE results, they also illustrate the challenges of this work—in how these institutions overcame common hurdles such as communicating results, engaging faculty and stakeholders in results, and moving data into action.

First, to disseminate and share NSSE results, institutions have found they must use multiple approaches including presentations, individual consultations, online postings, and sharing results with campus task forces and relevant departments. Bucknell’s institutional research office developed several data dashboards enabling stakeholders to understand the data

most effectively for their work by allowing faculty and staff to disaggregate findings by student populations and to connect NSSE data to other campus data.

Second, engaging faculty and stakeholders in assessment is an ongoing challenge. For faculty, the assessment of student learning is one of many competing priorities, and the same can be said for the students invited to complete the survey. To get students excited and faculty invested in NSSE, the University of Hawai’i at Mānoa conducted a comprehensive advertising campaign—deploying banners, flyers, prizes, websites, parties, information tables, and student organizations. Then, building on this momentum to get the results to educators who could use them, the institution created resources including video tutorials, interactive tools, and customized reports and presentations. At Oklahoma State University, drawing on their NSSE findings, faculty developers and the assessment office collaborated to encourage faculty to incorporate different teaching strategies.

Third, even for institutions with established means to communicate NSSE results and to work with groups that use the data, moving from discussion to action and from action to improvement can still be a challenge. While some individuals at Andrews University were initially skeptical about their Student-Faculty Interaction findings, they were able to triangulate and confirm the data using an additional campus survey. Digging into the data from both surveys, campus educators derived concrete strategies to improve their interaction with students—and the institution saw a substantial gain in this measure in their Multi-Year Report.

For staff who work in institutional research and assessment, issues related to dissemination, buy-in, and enacting change are ever-present. As successful inroads are made with one group, other campus units remain inexperienced in using evidence to improve. The accounts offered in this volume exemplify the sophistication and depth in institutions’ uses of NSSE data to ensure improvements in student learning on their campuses.

# Resources and References

## NSSE Resources Relevant to Examples Featured in this Report

### Report Builder

The NSSE Report Builder—an interactive tool that instantly generates reports of your choosing—draws from a database of NSSE respondents and can be queried using a combination of student and institutional characteristics. Variable options include the Engagement Indicators and individual survey items. Two versions of the Report Builder are available: Public (accessible to anyone) and Institution (a secure version where participating institutions can create customized reports using their own data).

[nsse.indiana.edu/html/report\\_builder.cfm](https://nsse.indiana.edu/html/report_builder.cfm)

### Accreditation Toolkits

One of the most common institutional uses of NSSE data is for accreditation—in self-studies, in quality improvement initiatives, in discussions during peer evaluator team visits, and in response to an accrediting body's request for improvement or for additional evidence of educational effectiveness. NSSE's Accreditation Toolkits include guidelines to map specific NSSE items to accreditation standards, timelines to help decide when and how often to collect student engagement data, and examples of how other institutions in each region have used NSSE in their accreditation efforts.

[nsse.indiana.edu/html/accred\\_toolkits.cfm](https://nsse.indiana.edu/html/accred_toolkits.cfm)

### NSSE Data User's Guide

Although NSSE reports and resources for creating customized reports are designed to increase data use, determining how best to engage campus audiences and influence campus action can be challenging. The NSSE Data User's Guide outlines strategies, suggests topics for consideration when communicating results, and provides worksheets with exercises to facilitate the use of NSSE data for accountability, assessment, and improvement.

[nsse.indiana.edu/html/data\\_users\\_guide.cfm](https://nsse.indiana.edu/html/data_users_guide.cfm)

### NSSE Item Campuswide Mapping

This resource maps NSSE items to the interests of 26 campus units and departments and suggests approaches to facilitating data sharing and campuswide involvement and action.

[nsse.indiana.edu/pdf/NSSE\\_Item\\_Campuswide\\_Mapping.pdf](https://nsse.indiana.edu/pdf/NSSE_Item_Campuswide_Mapping.pdf)

### NSSE, FSSE, and BCSSE Data Use Examples Search Tool

Over 1,000 examples illustrating how colleges and universities use their NSSE results to improve undergraduate education are available for viewing on the NSSE website.

[nsse.indiana.edu/html/using\\_nsse\\_db/](https://nsse.indiana.edu/html/using_nsse_db/)

### Webinars


NSSE's webinars are live, interactive presentations on various topics for faculty, administrators, institutional researchers, and other staff who want to better understand and use their NSSE data. Typically, sessions are an hour in length, including a Q&A period. All webinars are recorded and available from our archive for viewing at your convenience.

[nsse.indiana.edu/html/webinars.cfm](https://nsse.indiana.edu/html/webinars.cfm)

### Publications and Presentations Database

NSSE staff members regularly present at conferences (e.g., AIR, AAC&U, FYE, and ACPA) and publish work of interest to NSSE users. Search this extensive database by keyword and/or year.

[nsse.indiana.edu/html/publications\\_presentations.cfm](https://nsse.indiana.edu/html/publications_presentations.cfm)



### NSSE Data User's Guide With Worksheets

#### Introduction

The improvement efforts of colleges and universities are most promising when they are based on evidence of the performance and experience of their students inside and outside the classroom. In addition, institutions can choose to focus on the achievement and of how they use data to inform improvement efforts is essential in their responses to heightened demands for accountability and multiple pressures to increase student persistence and completion, support diversity, and ensure high-quality learning for all students.

The National Survey of Student Engagement (NSSE) provides institutions with data and reports about critical dimensions of educational quality. Whether a campus is interested in assessing the amount of time and effort students put into their studies or the extent to which students utilize learning opportunities on campus, NSSE provides colleges and universities with diagnostic, actionable information that can inform efforts to improve the experience and outcomes of undergraduate education.

NSSE results can inform and structure conversations as efforts to enhance student learning and success across campus offices and projects including curriculum management and revision, marketing and communications, faculty development, learning support and student housing. As an assessment instrument, NSSE can be used to identify both areas of strength as well as opportunities for growth to help make learning and the campus environment more cohesive with student needs and expectations.

Making NSSE data accessible and useful is key to engaging various campus audiences in identifying and analyzing institutional and program shortcomings and for developing targeted strategies for continuous improvement—critical steps in institutional growth and change. How can institutions determine who is interested in NSSE results? What are the best ways to connect campus groups and communities with this information? What audiences could use this information in responding to campus challenges and opportunities?

#### Conceptual Framework

Getting good data, communicating what the data mean to involved parties, and using the data accordingly are critical steps in institutional change and achieving improved educational outcomes. The approach known as "double-loop learning" (Argyris & Schön, 1998) informs this work and involves the creation of "communities of practice" (Lave & Wenger, 1991)—practitioners engaged in dialogue to share experiences, identify problems, and learn with and from each other. It is through this kind of collaboration that community members can take ownership in institutional issues and work together to help institutions grow.

**Simply reporting NSSE results will not lead to action.**

An early step in making the best use of NSSE data and reports is to review your institution's vision(s) for participating in NSSE. What motivated your NSSE participation and what does the campus intend for the results? Knowing if your campus plans to use NSSE for accreditation, for routine assessment, or for student retention efforts is important to determining what data are most relevant and to informing audiences eager to use the results.

Using NSSE data effectively also requires accurately interpreting the results and disseminating the information along with the results to people who can do something about student engagement. Simply reporting NSSE results will not lead to action. Many institutions have found that sharing results at retreats, faculty workshops, first-year experience task force meetings, and other group gatherings is a productive way to stimulate interest and action.

Inside the NSSE Data User's Guide	
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Worksheet #1-46	3-4
Sharing NSSE Results	9-11
Interim Uses of NSSE Data	12-13



## Publications Relevant to Effective Uses of NSSE Data

Association of American Colleges and Universities. (2007). *College learning for the new global century* (A report from the National Leadership Council for Liberal Education & America's Promise). Washington, DC: Author.

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### Share Your NSSE Story

NSSE is interested in collecting information on innovative practices surrounding student success and engagement in a variety of areas.

Do you have a NSSE data use story to share?

Your story may include methods for communicating results across institutions or using surveys (and other data) to develop more effective educational practices.

Consider including your NSSE stories about promotion of active learning, integration of student support into the classroom, teaching and learning improvement, or quality improvement initiatives for accreditation.

To share your institution's NSSE story, please visit our website:

**[nsse.indiana.edu/html/institutionStory.cfm](http://nsse.indiana.edu/html/institutionStory.cfm)**

# National Survey of Student Engagement Staff

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“Colleges and universities derive enormous internal value from participating in NSSE. Of equal importance is the reassurance to their external publics that a commitment to undergraduate education and its improvement is a high priority.”

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